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1985 Survey of the Electronic Funds Transfer Transaction System

by

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Bank Administration Institute

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Foreword

Bankers responsible for retail EFT management need current information on consumer usage behavior and self-service banking trends for making decisions regarding branch automation, off-site ATM deployment, and POS experiments. Intense competition and deregulation mandate the dissemination of meaningful, reliable, and current data.

Accordingly, Bank Administration Institute, in committing its resources to help fulfill these needs, has produced this Survey of Electronic Funds Transfer Transactions for the eighth consecutive year. It is designed to provide a financial institution with the data to analyze growth, usage patterns, and the transaction mix for 1983 through 1985 for the following EFT services: ACH, ATMs, and POS. The survey is directed toward financial institutions wishing to improve upon the effectiveness of their electronic banking decisions.

Marc J. Shapiro
Chairman of the Board
Bank Administration Institute



ELECTRONIC FUNDS TRANSFER TRANSACTIONS

The retail payments system is expected to experience continued growth throughout this decade. Improved technology, regulatory changes, evolving consumer usage habits, and new nonbank players will contribute to that growth.

Increased mergers and acquisitions in the banking industry are causing institutions to reexamine the configuration of their delivery systems. As a result, branch automation will become more prevalent. Existing networks will be expanded and new ones will be formed in markets that previously lacked sharing. Banks will begin to replace more ATMs and electronic payment at the point of sale will take hold. According to the Bank Network News, 857,000 POS transactions are occurring monthly on 5,500 terminals. Of the top 100 networks, 27 now have POS terminals on-line. Interest in POS activity is expected to continue and grow stronger.

All of these developments could be jeopardized, however, unless bankers are able to increase consumer acceptance of EFT services significantly. This report, the eighth in a series of Bank Administration Institute annual surveys on EFT transactions, is designed to provide financial institutions with the data to analyze growth, consumer usage patterns, and the transaction mix for 1983 through 1985. It is hoped that these data will assist bankers in making marketing decisions. Survey data for 1978 through 1982 may be found in previous reports.

Survey Respondents

In 1985, a total of 107 banks participated in the BAI EFT survey by collecting data on electronic funds transfer transactions during September 1985. The data were reported in monthly rather than weekly totals, as had been the case in previous years. The change to monthly statistics was preferred in order to make data collection easier and more reliable. Monthly results are also more consistent with frequently reported industry figures. Data from 1983 and 1984 were converted to monthly totals so that trends could be examined.

Results were obtained by analyzing the data that 107 banks supplied on ACH and ATM transactions and that 20 banks supplied on the POS questions. All of the participating banks had assets in excess of \$250 million.

Several respondents could not answer every survey question because of constraints inherent in the internal systems in their banks. Consequently, only those banks that furnished valid answers to all questions pertaining to a given formula were included in the tabulations. The formulas used for tabulating the results are provided to assist bankers in replicating the survey within their own banks for purposes of comparison.

Although the identities of reporting banks remain confidential, banks can use the data to compare their performance within a given market. The map in Appendix B defines the boundaries of the 16 geographic areas used in developing this report. An accompanying table shows the number of survey respondents from each area.

Background

Bank Administration Institute has been a leader in payment systems research for several years by conducting studies of both the check collection system and the electronic transfer of funds. The two surveys were combined in the BAI Check Collection Performance Measurement Survey until 1979. The EFT data were then published separately from the check collection survey in a format that subsequent reports followed closely.

Survey Highlights

- o ACH Transactions Sent. The average percentage of debits sent continues to decline and now stands at 46 percent compared to 52.1 percent and 56.5 percent during 1984 and 1983, respectively.
- o ACH Transactions Received. The average percentage of debits received has also declined rather sharply to 38.4 percent compared to 54.5 percent in 1984. Increased activity from the private sector continues to influence the transaction mix going through the ACH.
- o ACH Return Items. The percentage of ACH items returned remains low at under 1 percent, with debits showing a slightly higher rate of return than credits.
- o ACH Debit Types. Although insurance payments declined from 1984, they still make up 27.7 percent, on average, of all ACH debit types. Corporate payments and "other" payments also continue to be strong at 31 percent and 28.2 percent on average, respectively.
- o Proprietary ATM Transaction Mix. Proprietary cash withdrawals from checking and savings accounts declined slightly (from 50.3 percent in 1984 to 48.4 percent in 1985 for checking and from 8.5 percent in 1984 to 8.4 percent in 1985 for savings). Other transaction types remained fairly stable, varying by approximately 1 percent from 1984 levels.
- o Interchange ATM Transaction Mix. Interchange cash withdrawals from checking dropped over 10 percent from 1984 and now account for 45 percent of the total. Cash withdrawals from savings increased 1 percent from 1984 and now account for 10 percent, on average, of the total transactions. Balance inquiries increased slightly to 17.5 percent compared to 14.6 percent in 1984.
- o Dollar Value of Proprietary ATM Transactions. The average checking deposit on proprietary ATMs declined to \$422 from \$523 in 1984. Savings deposits increased from \$310 to \$466, on average, on proprietary ATMs. Bill payment average dollar values also increased to \$230 from \$175 a year ago.
- o Dollar Value of Interchange Transactions. The average dollar value of most interchange transactions remained fairly stable across the transaction mix, except for savings deposits, which rose from \$167 on average in 1984 to \$271 in 1985. Bill payment average dollar value also increased to \$180 from \$109 a year ago.
- o Monthly Proprietary ATM Transactions Per ATM Unit. Reductions from 1984 were seen in all transaction types on a per proprietary ATM basis. Cash withdrawals from credit cards per ATM unit declined sharply from 62.9 per month in 1984 to 37.1 per month in 1985.

- o Monthly Interchange ATM Transactions Per Unit. Cash withdrawals from credit cards per ATM unit declined sharply from 22.2 per month in 1984 to 9.4 per month in 1985. Although there were increases in some transaction types, total transactions per interchange ATM declined, reflecting the increased number of machines available.
- o Proprietary ATM Locations. While the number of per ATM proprietary transactions are decreasing, the per location statistics are increasing slightly, signifying an increased number of machines at the various locations. Total proprietary transactions per ATM location, on average, increased 2 percent over 1984 and now stand at 2,542 per month. Increases were mostly seen in drive-up installations at the main office, and at universities and shopping centers.
- o Interchange ATM Locations. Average interchange transactions increased significantly at main office vestibule locations (869.1 per month per location in 1985 compared to 667.2 in 1984), branch office drive-up locations (467.0 per month per location in 1985 compared to 92.1 in 1984), free-standing off-premise locations (618.7 per month per location in 1985 compared to 494.2 in 1984), shopping centers (864.0 per month per location in 1985 compared to 472 in 1984), grocery/retail stores (509.3 per month per location in 1985 compared to 470.1 in 1984), and office locations (518.2 in 1985 compared to 289.6 in 1984).
- o ATM Units by Area. Few changes occurred in the placement of ATMs in various locations over 1984. No one significant location stood out as being a more or less favorable choice over last year's placements. This fact also holds true for ATM installation plans.
- o ATM Service Charges. Of the banks surveyed, 46 percent, on average, are now charging the customer some type of service fee for ATM usage; 86.3 percent of these fees are charged on a per transaction basis.
- o Active ATM Cards. The percentage of the surveyed banks' total card base that is active now stands at 51.5 percent on average, an increase of 10 percent over last year.

2 ACH FINDINGS

As of November 1985, 31 ACHs were operating throughout the United States. ACH volume continues to grow. During the survey period (September 1985), total monthly volume reached 64,081,245 transactions, an increase of 17 percent from the same period in 1984.

The private sector continues to expand and, at 40,431,286 transactions during September 1985, it accounted for 63 percent of the total ACH transactions. To reduce costs and improve efficiency, several local ACH associations are continuing to seek private computer services companies that compete with the Federal Reserve in processing ACH transactions.

Because this survey is limited to a sample of commercial banks with assets of more than \$250 million, the volume of ACH transactions is statistically insignificant. However, when the data are represented as percentages, trends relating to transaction types can be observed. Tables 1 through 7 present ACH-related data.

ACH Transactions Sent

As shown in Table 1, the average percentage of debits sent decreased from 52.1 percent in 1984 to 46.0 percent in 1985. In contrast, the average percentage of credits sent increased from 47.9 percent in 1984 to 54.5 percent in 1985.

ACH Transactions Received

For the first time in the past three years the percentage of debits received (38.4 percent) was lower than the percentage of credits received (61.6 percent), as shown in Table 2. The only areas reporting higher debits than credits were Cleveland and Denver.

ACH Transactions Sent Versus Received

Table 3 shows that the overall percentage of ACH debit items sent versus received remained nearly unchanged from 1984 statistics. The percentage of debits sent versus received was 54.3 percent. The percentage of credits sent versus received dropped 12 percent from 1984 and now stands at 45.1 percent.

Total ACH items sent versus received is nearly evenly split now at 49.8 percent and 50.2 percent respectively.

ACH Transactions Returned

ACH transactions were measured by return items sent and by return items received. Returned items refer to any ACH transaction returned to the originator that could not be posted to an account or for which no prenotification was on file. Returned items received are defined as any ACH transaction received by the originator, returned by either the automatic clearing house or the intended receiver. The survey did not ask respondents to identify the reasons for returns.

The percentage of total ACH items returned of items sent shown in Table 4 decreased slightly from 1984 and now stands at less than 1 percent on average. The number of debits returned remained higher than the percentage of credits returned. This was especially true in the Pittsburgh area where the percentage of debits returned jumped to 8.3 percent.

The percentage of total ACH items returned of items received (Table 5) also decreased from 1984 and also stands at less than 1 percent on average. The percentage of debits returned of those received decreased from 2.6 percent to 1.4 percent in 1985, while the percentage of credits returned of those received remained the same at 0.2 percent.

ACH Debit Types

The percentage of the various ACH debit types sent and received of the total is displayed in Tables 6 and 7. Insurance premiums, although still the second largest type of ACH debit transactions sent, dropped significantly from 51.8 percent of the total transactions in 1984 to 27.7 percent this year. Corporate payments, on the other hand, rose sharply from 17.5 percent of the total in 1984 to 31.0 percent of the total transactions sent in 1985. These corporate payments now account for the largest percentage of all transactions. The growth in corporate debit transactions through the ACH is due to the increasing cost of traditional paper-based methods and to the Federal Reserve's float recovery program, which reduced paper-based float benefits. All the other categories reported either a slight increase or remained stable compared to last year's statistics.

As expected, the number of insurance premiums received declined from 50.8 percent to 20.5 percent of the total transactions in 1985; corporate payments received rose to 14.2 percent of the total from 10.8 percent. "Other" payments received rose approximately 10 percent over 1984 statistics also. They now account for 43.6 percent, on average, of the total transactions received.

TABLE 1
PERCENTAGE OF ACH DEBITS AND CREDITS SENT BY AREA

Area	Percent Debits ⁺			Percent Credits ⁺⁺		
	1983	1984	1985	1983	1984	1985
Boston	41.0%	54.7%	28.9%	59.0%	45.3%	71.1%
New York	46.4	60.0	40.1	53.6	40.0	59.9
Philadelphia	22.0	24.2	23.5	78.0	75.8	76.5
Pittsburgh	75.2	48.3	9.9	24.8	51.7	90.1
Washington, D.C.	40.3	32.1	33.8	59.7	67.9	66.2
Atlanta	81.4	49.4	54.3	18.6	50.6	45.7
Chicago	51.6	36.1	51.7	48.4	63.8	48.3
Cleveland	57.9	49.3	45.1	42.1	50.7	54.9
Detroit	50.0	46.5	62.8	50.0	53.5	37.2
Minneapolis/St. Paul	60.1	*	*	39.9	*	*
St. Louis	52.5	71.2	85.5	47.5	28.8	45.7
Dallas	64.0	27.1	50.4	36.0	72.9	49.6
Houston	72.5	85.3	45.6	27.5	14.7	54.4
Los Angeles	53.4	50.2	57.7	46.6	49.8	42.3
San Francisco	63.0	55.3	45.7	37.0	44.7	54.3
Denver	68.6	51.1	53.6	31.4	48.9	46.4
Average	56.5%	52.1%	46.0%	43.5%	47.9%	54.5%
Median	37.4%	42.4%	37.6%	64.0%	57.6%	63.5%

*No respondents; $\frac{+Q1}{Q5} \times 100$; $\frac{++Q3}{Q5} \times 100$.

TABLE 2
PERCENTAGE OF ACH DEBITS AND CREDITS RECEIVED BY AREA

Area	Percent Debits+			Percent Credits++		
	1983	1984	1985	1983	1984	1985
Boston	54.1%	51.4%	26.5%	45.9%	48.6%	73.5%
New York	52.6	27.1	29.3	47.4	72.9	70.7
Philadelphia	51.5	31.9	29.2	48.5	68.1	70.8
Pittsburgh	60.6	28.7	42.3	39.4	71.3	57.7
Washington, D.C.	48.4	43.9	34.0	51.6	56.1	66.0
Atlanta	59.4	71.6	38.1	40.6	28.4	61.9
Chicago	57.8	46.4	46.3	42.2	45.9	48.2
Cleveland	49.0	46.0	58.1	51.0	54.0	41.9
Detroit	74.4	29.6	35.0	25.6	70.4	65.0
Minneapolis/St. Paul	58.5	32.4	*	41.5	67.6	*
St. Louis	58.8	65.1	46.3	41.2	34.9	53.7
Dallas	66.8	33.8	40.4	33.2	66.2	77.3
Houston	56.5	71.8	25.0	43.5	28.2	75.0
Los Angeles	52.9	50.7	33.5	47.1	49.3	66.5
San Francisco	48.6	60.5	34.7	51.4	39.5	65.3
Denver	77.5	57.0	58.4	22.5	43.0	41.6
Average	57.4%	54.5%	38.4%	42.6%	45.4%	61.6%
Median	58.8%	51.8%	35.8%	41.4%	47.4%	64.1%

*No respondents; $\frac{+Q2}{Q6} \times 100$; $\frac{++Q4}{Q6} \times 100$.

TABLE 3
PERCENTAGE OF ACH ITEMS SENT VERSUS RECEIVED BY AREA

Area	Percent of Debits ⁺					
	Sent			Received		
	1983	1984	1985	1983	1984	1985
Boston	48.3%	69.8%	59.6%	51.7%	30.2%	40.4%
New York	56.6	92.7	66.9	43.4	7.3	33.1
Philadelphia	40.0	41.0	42.5	60.0	59.0	57.5
Pittsburgh	56.1	77.7	7.0	43.9	22.3	93.0
Washington, D.C.	46.5	31.3	43.4	53.5	68.7	56.6
Atlanta	60.5	32.1	54.7	39.5	67.9	45.3
Chicago	59.5	80.4	60.9	40.5	19.6	39.1
Cleveland	50.8	61.8	35.9	49.2	38.2	64.1
Detroit	15.8	29.7	83.3	84.2	70.3	16.7
Minneapolis/St. Paul	49.0	*	*	51.0	100.0	*
St. Louis	51.1	51.5	67.1	48.9	48.5	32.9
Dallas	34.7	27.6	57.4	65.3	72.4	42.6
Houston	27.0	49.4	49.8	73.0	50.6	50.2
Los Angeles	44.5	45.7	47.6	55.5	46.2	52.4
San Francisco	32.2	34.7	39.7	67.8	65.3	60.3
Denver	20.8	19.4	23.0	79.2	80.6	77.0
Average	47.8%	54.7%	54.3%	52.2%	45.3%	45.7%
Median	17.6%	30.0%	36.8%	83.0%	71.9%	64.4%

*No respondents; $\frac{+ Q1/Q2}{Q1 + Q2} \times 100$; $\frac{\pm Q3/Q4}{Q3 + Q4} \times 100$; $\frac{\$ Q5/Q6}{Q5 + Q6} \times 100$.

Note: The preceding footnotes also pertain to the continuation of Table 3 on the following page.

TABLE 3 (Continued)

Area	Percent of Credits†					
	Sent			Received		
	1983	1984	1985	1983	1984	1985
Boston	61.4%	66.9%	56.7%	38.6%	33.1%	43.3%
New York	62.5	75.8	42.1	37.5	24.2	57.9
Philadelphia	71.5	50.4	49.9	28.5	49.6	50.1
Pittsburgh	39.3	59.9	33.5	60.7	40.1	66.5
Washington, D.C.	54.6	43.0	43.6	45.4	57.0	56.4
Atlanta	34.0	55.0	38.5	66.0	45.0	61.5
Chicago	65.3	87.9	58.2	34.7	12.1	41.8
Cleveland	41.9	58.6	48.7	58.1	41.4	51.3
Detroit	35.3	17.0	61.5	64.7	83.0	38.5
Minneapolis/St. Paul	47.3	*	*	52.7	100.0	*
St. Louis	57.5	44.5	48.4	42.5	55.6	51.6
Dallas	37.4	34.4	41.0	62.6	65.6	59.0
Houston	30.0	74.3	28.2	84.6	70.0	71.8
Los Angeles	44.0	46.2	25.1	56.0	53.8	74.9
San Francisco	20.8	39.7	29.4	79.2	60.3	70.6
Denver	29.3	23.4	26.7	70.7	76.6	73.3
Average	48.8%	57.1%	45.1%	51.2%	42.9%	54.9%
Median	31.4%	40.9%	37.0%	69.2%	60.4%	63.6%

Total ACH Items§

Area	Sent			Received		
	1983	1984	1985	1983	1984	1985
Boston	55.2%	68.5%	57.5	44.8%	31.5	42.5%
New York	59.6	85.1	59.7	40.4	14.9	40.3
Philadelphia	61.0	47.7	48.0	39.0	52.3	52.0
Pittsburgh	50.7	67.4	24.4	49.3	32.6	75.6
Washington, D.C.	51.0	38.4	43.5	49.0	61.6	56.5
Atlanta	52.8	40.7	45.9	47.2	59.3	54.1
Chicago	62.1	84.0	58.2	37.9	16.0	41.8
Cleveland	46.6	60.1	42.0	53.4	39.9	58.0
Detroit	21.8	21.2	73.6	78.2	78.8	26.4
Minneapolis/St. Paul	48.3	*	*	51.7	100.0	*
St. Louis	53.9	49.2	52.4	46.1	50.8	47.6
Dallas	35.6	32.2	52.0	64.4	67.8	48.0
Houston	22.4	45.1	35.2	77.6	54.9	64.8
Los Angeles	44.3	46.0	34.5	55.7	54.0	65.5
San Francisco	26.8	36.7	33.3	73.2	63.3	66.7
Denver	22.9	21.2	24.6	77.1	78.8	75.4
Average	48.2%	55.8%	49.8%	51.8%	44.2	50.2%
Median	30.8%	35.9	38.7%	69.2%	64.1	61.7%

TABLE 4
PERCENTAGE OF ACH ITEMS RETURNED OF ITEMS SENT BY AREA

Area	Percent Debits ⁺			Percent Credits [±]			Percent Total [§]		
	1983	1984	1985	1983	1984	1985	1983	1984	1985
Boston	0.4%	0.2%	0.7%	0.2%	0.1%	0.1	0.2%	0.1%	0.3%
New York	0.7	3.3	0.8	0.1	0.2	0.2	0.6	2.1	0.4
Philadelphia	2.5	1.0	1.1	0.3	0.3	0.1	0.8	0.5	0.4
Pittsburgh	0.4	0.0	8.3	0.6	0.1	0.3	0.4	0.1	1.1
Washington, D.C.	1.3	3.1	1.9	0.2	0.7	0.3	0.6	1.5	0.8
Atlanta	0.6	1.0	0.7	0.3	0.1	0.2	0.5	0.6	0.5
Chicago	0.2	0.1	0.1	0.2	0.1	0.3	0.2	0.1	0.2
Cleveland	0.8	0.4	1.8	0.2	0.2	0.5	0.5	0.3	1.1
Detroit	5.2	1.5	0.2	0.4	0.3	0.0	3.3	1.1	0.2
Minneapolis/St. Paul	0.0	*	*	0.0	*	*	0.0	*	*
St. Louis	0.6	0.2	0.3	0.1	0.1	0.2	0.4	0.2	0.3
Dallas	0.5	0.2	0.3	0.3	0.0	0.0	0.4	1.1	0.2
Houston	0.3	0.0	2.3	0.2	0.0	0.0	0.3	0.0	1.1
Los Angeles	1.8	2.3	2.0	0.5	0.5	0.7	1.3	1.4	1.9
San Francisco	3.0	1.8	1.3	1.0	0.7	0.5	2.3	1.4	1.3
Denver	0.7	0.4	0.5	0.1	0.1	0.0	0.5	0.2	0.3
Average	0.8%	1.6%	0.7%	0.2%	0.2%	0.2%	0.6%	0.9%	0.5%
Median	2.1%	1.0%	1.4%	0.1%	0.1%	0.2%	0.9%	0.6%	0.8%

*No respondents; $\frac{+Q7}{Q1} \times 100$; $\frac{+Q9}{Q3} \times 100$; $\frac{\$ Q11}{Q5} \times 100$.

TABLE 5
PERCENTAGE OF ACH ITEMS RETURNED OF ITEMS RECEIVED BY AREA

Area	Percent Debits ⁺			Percent Credits [±]			Percent Total [§]		
	1983	1984	1985	1983	1984	1985	1983	1984	1985
Boston	0.4%	0.6%	3.5%	0.3%	0.2%	0.3%	0.3%	0.4%	1.2%
New York	1.2	52.4	2.8	0.3	0.7	0.1	0.8	14.7	1.1
Philadelphia	0.9	0.4	0.5	0.2	0.3	0.2	0.6	0.3	0.3
Pittsburgh	0.8	1.4	0.1	0.3	0.1	*	0.6	0.5	0.1
Washington, D.C.	0.9	0.6	1.8	0.2	0.3	1.3	0.5	0.4	1.4
Atlanta	2.7	0.9	1.1	0.1	0.1	*	1.7	0.7	0.4
Chicago	1.9	4.2	2.7	0.7	0.7	0.7	1.4	2.4	1.6
Cleveland	1.6	3.8	1.0	0.2	0.1	0.3	0.8	1.8	0.7
Detroit	0.2	0.5	0.1	0.5	0.0	*	0.3	0.1	*
Minneapolis/St. Paul	0.9	0.0	0.0	0.1	0.0	0.0	0.6	0.0	0.0
St. Louis	0.9	0.7	1.6	0.6	0.1	0.1	0.8	0.5	0.8
Dallas	0.3	0.2	0.7	0.1	0.1	0.2	0.3	0.1	0.5
Houston	0.1	0.0	1.1	0.0	0.0	0.0	0.1	0.0	0.3
Los Angeles	1.1	1.9	1.5	0.3	0.1	0.1	0.7	1.0	0.7
San Francisco	0.6	0.4	0.6	0.1	0.1	0.1	0.3	0.3	0.4
Denver	0.7	0.4	0.5	0.1	0.0	0.0	0.5	0.3	0.3
Average	1.1%	2.6%	1.4%	0.2%	0.2%	0.2%	0.7%	1.5%	0.7%
Median	0.3%	0.4%	0.3%	0.0%	0.0%	0.1%	0.2%	0.2%	0.3%

*No respondents; $\frac{+Q8}{Q2} \times 100$; $\frac{±Q10}{Q4} \times 100$; $\frac{§ Q12}{Q6} \times 100$.

TABLE 6
PERCENTAGE OF ACH DEBIT TRANSACTIONS SENT BY TYPE OF TRANSACTION BY AREA

Area	Insurance Premium ⁺			Home Mortgage [±]		
	1983	1984	1985	1983	1984	1985
Boston	2.1%	6.4%	46.3%	0.5%	1.1%	0.8%
New York	45.0	91.3	24.8	0.0	0.4	0.0
Philadelphia	5.7	3.0	9.1	0.0	0.2	4.6
Pittsburgh	0.8	2.4	0.0	0.0	0.0	0.0
Washington, D.C.	68.0	56.6	36.0	3.9	0.0	2.6
Atlanta	66.7	34.4	24.1	5.9	2.2	5.1
Chicago	36.5	25.2	21.1	0.0	15.5	1.4
Cleveland	10.4	17.5	13.9	1.9	1.8	1.7
Detroit	0.0	0.0	0.0	0.5	0.0	6.4
Minneapolis/St. Paul	74.6	*	0.0	7.1	*	0.0
St. Louis	35.6	46.9	47.5	9.7	6.5	1.0
Dallas	6.6	6.9	19.3	0.2	1.5	0.3
Houston	0.0	0.0	0.0	0.0	0.0	0.0
Los Angeles	84.5	21.6	32.6	0.0	0.0	2.2
San Francisco	58.8	2.2	3.2	4.2	0.1	7.0
Denver	73.3	68.8	79.3	4.9	2.7	1.2
Average	40.4%	51.8%	27.7%	3.1%	1.6%	2.3%
Median	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

*No respondents; $\frac{+Q13}{Q23} \times 100$; $\frac{+Q15}{Q23} \times 100$; $\frac{\$ Q17}{Q23} \times 100$; $\frac{II Q19}{Q23} \times 100$; $\frac{\#Q21}{Q23} \times 100$.

Note: The preceding footnotes also pertain to the continuation of Table 6 on the following page.

TABLE 6 (Continued)

Area	Telephone Bill Payment\$			Corporate Payment II		
	1983	1984	1985	1983	1984	1985
Boston	0.7%	0.2%	0.5%	0.1%	8.0%	27.1%
New York	0.0	0.2	0.0	50.3	6.4	34.3
Philadelphia	6.8	11.7	2.2	80.6	63.4	17.4
Pittsburgh	0.2	0.3	0.0	99.0	97.4	100.0
Washington, D.C.	0.0	0.6	0.0	27.3	27.7	18.5
Atlanta	1.7	2.3	4.4	14.1	15.2	25.9
Chicago	0.0	0.0	0.0	60.7	38.0	74.6
Cleveland	0.0	0.0	0.0	21.4	17.3	85.6
Detroit	0.0	0.0	0.0	61.6	10.4	13.4
Minneapolis/St. Paul	0.0	*	0.0	11.2	*	0.0
St. Louis	0.0	0.0	11.0	21.8	34.7	32.7
Dallas	0.3	4.5	1.2	76.6	86.9	9.6
Houston	0.0	0.0	0.0	100.0	100.0	81.6
Los Angeles	0.8	0.0	1.1	4.5	1.4	0.5
San Francisco	0.0	0.0	0.0	28.4	6.0	7.8
Denver	0.0	0.0	0.0	8.0	6.1	6.0
Average	1.0%	0.8%	1.9%	32.1%	17.5%	31.0%
Median	0.0%	0.0%	0.0%	40.9%	19.4%	25.2%

Area	Other Payments #		
	1983	1984	1985
Boston	96.6%	84.4%	25.3%
New York	4.7	1.7	40.9
Philadelphia	6.9	21.7	66.7
Pittsburgh	0.0	0.0	0.0
Washington, D.C.	0.8	15.0	3.7
Atlanta	11.6	45.9	38.5
Chicago	2.8	21.2	2.9
Cleveland	66.3	63.3	18.9
Detroit	37.9	89.6	80.2
Minneapolis/St. Paul	7.1	*	0.0
St. Louis	32.9	11.9	7.7
Dallas	16.3	0.2	43.5
Houston	0.0	0.0	18.4
Los Angeles	10.4	76.9	63.6
San Francisco	8.6	91.7	2.6
Denver	13.8	22.4	13.5
Average	23.4%	28.4%	28.2%
Median	4.6%	20.6%	16.3%

TABLE 7
PERCENTAGE OF ACH DEBIT TRANSACTIONS RECEIVED BY TYPE OF TRANSACTIONS BY AREA

Area	Insurance Premium ⁺			Home Mortgage [±]		
	1983	1984	1985	1983	1984	1985
Boston	3.1%	31.1%	25.2%	0.5%	0.0%	1.3%
New York	44.7	56.5	21.0	0.0	0.4	0.7
Philadelphia	55.5	43.8	31.4	0.1	5.7	0.3
Pittsburgh	62.0	71.1	45.0	0.0	0.0	5.3
Washington, D.C.	40.2	46.8	26.0	5.8	1.5	2.0
Atlanta	45.9	75.5	25.4	6.3	1.8	4.3
Chicago	46.4	36.1	55.4	2.5	4.0	0.4
Cleveland	51.1	38.3	7.1	2.0	2.1	2.1
Detroit	33.2	10.6	6.3	0.4	0.0	0.0
Minneapolis/St. Paul	37.4	14.0	0.0	0.8	3.7	0.0
St. Louis	21.0	28.0	25.1	2.6	1.2	0.5
Dallas	12.1	58.7	0.0	0.0	0.1	0.0
Houston	1.2	77.0	20.0	0.0	0.1	1.0
Los Angeles	55.6	56.7	47.5	0.8	0.6	2.5
San Francisco	48.7	30.1	23.0	8.3	0.7	3.1
Denver	7.0	8.8	7.3	1.2	0.7	2.7
Average	30.3%	50.8%	20.5%	2.5%	1.4%	2.1%
Median	46.8%	44.0%	32.6%	0.1%	0.2%	0.3%

*No respondents; $\frac{+Q14}{Q24} \times 100$; $\frac{+Q16}{Q24} \times 100$; $\frac{\$Q18}{Q24} \times 100$; II $\frac{Q20}{Q24} \times 100$; $\frac{\#Q22}{Q24} \times 100$.

Note: The preceding footnotes also pertain to the continuation of Table 7 on the following page.

TABLE 7 (Continued)

Area	Telephone Bill Payment\$			Corporate Payment II		
	1983	1984	1985	1983	1984	1985
Boston	2.8%	1.0%	0.8%	8.0%	29.0%	31.7%
New York	0.0	0.0	0.0	24.8	13.6	16.8
Philadelphia	0.0	1.9	2.1	34.2	23.0	31.4
Pittsburgh	6.5	16.7	0.0	13.5	0.0	5.6
Washington, D.C.	0.0	0.3	0.3	35.0	37.5	11.4
Atlanta	1.6	1.3	1.0	15.5	5.5	10.3
Chicago	1.8	3.2	0.6	14.3	40.0	27.0
Cleveland	0.2	0.1	0.0	23.5	19.2	23.1
Detroit	0.1	0.0	0.0	17.8	9.0	3.9
Minneapolis/St. Paul	10.2	6.8	0.0	15.6	6.3	0.0
St. Louis	2.6	54.6	1.4	15.9	6.3	15.1
Dallas	0.0	0.0	0.0	2.9	11.7	0.0
Houston	0.0	0.0	1.0	70.0	22.8	50.0
Los Angeles	1.8	5.0	0.3	14.7	4.9	6.1
San Francisco	0.4	1.9	0.2	21.0	4.8	6.2
Denver	0.0	0.9	0.0	3.6	4.9	3.1
Average	1.4%	4.4%	0.4%	18.0%	10.8%	14.2%
Median	0.0%	0.0%	0.0%	18.9%	14.4%	15.9%

Area	Other Payments #		
	1983	1984	1985
Boston	85.6%	38.8%	20.5%
New York	30.5	29.5	47.6
Philadelphia	10.2	17.5	34.9
Pittsburgh	18.0	12.2	44.1
Washington, D.C.	19.0	13.9	5.7
Atlanta	30.7	16.0	24.3
Chicago	35.0	16.7	5.7
Cleveland	23.2	40.2	67.7
Detroit	48.5	80.4	89.8
Minneapolis/St. Paul	36.0	69.2	0.0
St. Louis	57.9	10.0	58.0
Dallas	85.0	29.4	100.0
Houston	28.8	0.0	28.0
Los Angeles	27.1	32.8	28.7
San Francisco	21.6	62.6	11.8
Denver	88.2	84.6	83.6
Average	47.8%	32.3%	43.6%
Median	16.2%	16.3%	24.3%

3 ATM FINDINGS

The financial industry is reevaluating its plans for the future of the ATM machine as bankers cautiously examine customer usage patterns and emerging EFT alternatives. ATM shipments in 1985 were 25 percent lower than the previous year. ATM-sharing is increasing, which might also account for a slowdown in the purchase of new machines. Point of sale is expanding as more and more retailers enter the payment systems market. Home banking and customer self-service terminals are also being tested further.

To help determine the best strategies for ATM deployment regarding these trends in the EFT industry, the following sections present ATM findings. They provide survey responses to the transaction mix, average dollar variables, and transaction volumes for both proprietary and interchange ATMs and cash dispensers. In addition, statistical information is provided on 1986 equipment installation plans and on service charges for ATM transactions. Tables 8 through 26 present ATM-related data.

Transaction Mix

Proprietary

The percentage of proprietary ATM transactions to the total indicates minimal changes from 1984 to 1985 (Table 8). For the sixth consecutive year, cash withdrawals from checking are the most frequently completed ATM transaction (48.4 percent). However, this percentage is declining slightly over time. Deposits to checking accounts decreased slightly, whereas deposits to savings accounts remained the same. Balance inquiries also continue to decline slightly each year.

Interchange

Interchange cash withdrawals declined more than 10 percent from 1984, as shown in Table 9. Balance inquiries on shared machines increased approximately 3 percent over 1984. Checking deposits on interchange ATMs dropped for the second consecutive year, indicating that consumers may still be hesitant about making deposits at ATM locations away from their own bank. Midwest banks continue to show higher percentages of these checking deposits on shared machines than banks in other parts of the nation.

The least frequently completed transactions continue to be cash withdrawals from credit card, savings deposits, and bill payments on shared machines.

Dollar Value of ATM Transactions

The average dollar values of proprietary and shared ATM transactions by area are shown in Tables 10 and 11, respectively. The average dollar value of a proprietary cash withdrawal from checking in 1985 was \$44

compared to \$41 on shared machines. On the deposit side, the average proprietary transaction declined from \$523 in 1984 to \$422 in 1985, while the interchange deposit value increased from \$342 in 1984 to \$385 in 1985. The average dollar values for both proprietary and interchange savings deposits increased from \$310 in 1984 to \$466 in 1985 and from \$167 in 1984 to \$271 in 1985 respectively. These values indicate that consumers are making fewer savings deposits but are increasing the dollar value when they do complete this type of transaction.

Monthly ATM Transactions

The average number of total proprietary ATM transactions per machine per month in 1985 was 4,172, as shown in Table 12. Highest numbers reported were in New York, Atlanta, and Los Angeles. These numbers represent a slight decline over past years, however, as additional machines are deployed (bringing down per machine numbers) and more off-site shared ATMs are available. Declines were present in all per proprietary ATM categories.

The average number of total interchange ATM transactions per month in 1985 was 761.9, as shown in Table 13. Highest per ATM per month interchange numbers reported were in Dallas (2,020), Chicago (1,985.8), and Pittsburgh (1,917.8). New York also showed a dramatic increase from 42.4 interchange transactions per month per machine in 1984 to 478.5 in 1985.

Dollar Value of ATM Activity

Proprietary

Historically, ATMs have been considered as net deposit takers. By multiplying the average dollar amounts by the average transaction volumes (Table 10 X Table 12), the dollars deposited to dollars withdrawn can be calculated for proprietary transactions. This net deposit trend still held true in 1985, although a decrease in the strength of the ratio was seen.

1985 = 1.70 to 1 1984 = 1.92 to 1 1983 = 1.80 to 1

Interchange

Interchange dollars deposited to dollars withdrawn can be determined by using Table 11 x Table 13. This ratio continues to decline, although only slightly from 1984. This decline is to be expected as sharing continues to expand.

1985 = 0.70 to 1 1984 = 0.78 to 1 1983 = 1.13 to 1

Transactions per ATM Locations

Proprietary

A significant increase (185 percent) was registered in proprietary drive-up transactions at the main office, as shown in Table 14. Increases were also seen in branch office drive-up, vestibule, and lobby transactions. Proprietary transactions on main office lobby ATMs are down, however, except in the Boston area, which experienced large increases.

Proprietary transactions at off-site locations changed minimally from the 1984 data, except at grocery store locations where the number of monthly transactions fell from 1,060.7 in 1984 to 464.9 in 1985.

Interchange

Table 15 shows that although interchange transactions continue to decline for lobby machines in the main bank and branch offices, they are increasing at branch office drive-up locations. Drive-up interchange transactions at the branches rose from 92.1 per month in 1984 to 467 per month in 1985.

The most significant increases in interchange transactions were seen in off-site locations. While total bank on-site interchange transactions increased only 5 percent from 1984 to 1985, off-premises interchange transactions increased 40 percent. Increases were seen in virtually all locations except hospitals, where interchange transactions dropped from 492.6 per month to 400.9. The biggest increase was seen at shopping center locations (472.0 in 1984 compared to 864.0 in 1985 per month per location) and in office/corporate complexes (289.6 in 1984 compared to 518.2 in 1985 per month per location).

The biggest increases in total interchange transactions per location were seen in Boston, New York, Los Angeles, and San Francisco.

ATM Units by Area

ATM units at the various locations remained somewhat stable during 1985 (see Table 16). There are still a higher number of machines at branch versus main office locations, particularly in through-the-wall installations. Although their numbers are declining slightly, on average, 42.2 percent of all ATMs of the banks surveyed are still through-the-wall installations at the branches.

While slight decreases were seen in main office locations, off-site locations increased slowly. However, off-sites still account for less than 20 percent of the total ATMs deployed on average. Grocery/retail locations now account for 6 percent of total ATM installations on average. St. Louis, Dallas, and San Francisco showed unusually high numbers for grocery/retail locations because 25.6 percent, 27.3 percent, and 27.8 percent of their total units are at these types of locations, respectively.

ATM Installation Plans

The data indicate that during 1986 banks are planning to deploy and/or replace more ATM machines at branch offices (71.8 percent) than at any other location, including off-premises locations. Specifically they are considering through-the-wall (29.5 percent) and lobby installations (19.2 percent). Plans for drive-up ATMs are also strong (15.4 percent). Individual statistics for each city are shown in Table 17.

Renewed interest in branch office ATM installations may be attributed to any number of factors. Transaction levels at off-site locations may have been lower than expected. During 1985, a surprising increase in drive-up transaction levels may have triggered new deployment direction, or banks may simply be planning to replace older ATMs. These particular ATMs may be part of the bank's total branch reconfiguration plan, because an increasing number of financial institutions are experimenting with new automated services in the branches.

Plans for new ATMs at main office locations continue to drop and now account for less than 2 percent of the total.

INSTALLATION PLANS FOR 1986

Main Office — Overall Average

<u>Location</u>	<u>Percent of All Locations</u>
Lobby	.6%
Vestibule	.1
Through-the-wall	.6
Drive-up	.1
Total	1.4%

Branch Office — Overall Average

<u>Location</u>	<u>Percent of All Locations</u>
Lobby	19.2%
Vestibule	7.7
Through-the-wall	29.5
Drive-up	15.4
Total	71.8%

Off-Premise — Overall Average

<u>Location</u>	<u>Percent of All Locations</u>
Free-standing	7.8%
University-college	.6
Shopping center	1.7
Grocery store	7.7
Office/corporate	4.2
Hospital	1.6
Other	<u>2.9</u>
Total	26.5%

Banks are planning to deploy 26.5 percent of their ATMs at off-site locations during 1986. The most popular locations continue to be grocery stores, office complexes, and free-standing sites.

These installation plans are interesting when compared to what was on the drawing board in 1984:

1985 vs. 1986 Installation Plans (Percent of Total)

<u>Overall Average</u>	<u>1986</u>	<u>1985</u>
Main office	1.4%	1.5%
Branch office	71.8%	51.9%
Off-site	26.5%	46.6%

Cash Dispenser Transactions per Location

Tables 18 and 19 show transaction levels per cash dispenser location by area. While there were few cash dispenser transactions at main office and branch office locations (except in Atlanta, Philadelphia, and Los Angeles), off-site locations experienced some success.

Proprietary transactions were evident across virtually all off-premises cash dispenser locations, except at free-standing sites. An average of 2,578 proprietary cash withdrawals were completed per month on machines located at colleges and universities (Table 18).

Interchange transactions (Table 19) were more evident in shopping centers (3,295 cash withdrawals per month on average) and in hospitals (738 cash withdrawals per month on average).

Banks deployed an increasing number of cash dispensers in 1985, especially in off-site locations, as shown in Table 20. Significant deployment was seen in grocery, office, and college/university settings. On average, 74 percent of all cash dispenser locations were in grocery stores in 1985.

This trend is expected to continue because banks report that the same locations are targets for cash dispenser installations in 1986 (Table 21). They also plan to add more cash dispensers at hospital sites.

On-Line Versus Off-Line

As Table 22 indicates, 13 of the 16 geographic areas reported 100 percent on-line operations during 1985. Philadelphia and Cleveland reported increases in off-line activity. Chicago on-line activity increased nearly 20 percent over 1984.

ATM Service Charges

Table 23 shows the percentage of financial institutions that are currently charging ATM fees. Almost half (46.0 percent) of the responding financial institutions, on average, levy some form of a service charge on their customers. In the Minneapolis/St. Paul and Dallas areas, 100 percent of the responding institutions levy a charge. Of those that charge, 86.3 percent do so on a per transaction basis; 13.7 percent charge a flat fee (Table 24). In 98 percent of the cases, the ATM item fee is less than or equal to the item fee for a check (Table 25).

Proprietary ATM Access Cards

The percentage of active proprietary cards in 1985 increased nearly 10 percent over 1984 data and now stands at 51.5 percent. Table 26a provides a breakdown by geographic area in addition to showing that the percentage of active cards ranges from 30.8 percent (Atlanta) to 78.6 percent (Cleveland). These statistics, compared to national averages for all banks, appear high and may indicate that customers of the larger banks (\$250 million or more in assets) are more active users of ATMs than the general population.

National ATM Access Cards

The percentage of active national ATM access cards stands at 57.3 percent on average, for the responding banks, as shown in Table 26b. Denver had an exceedingly high active card base, reporting 94.7 percent. These numbers are not only extremely encouraging, but demonstrate that the national networks are expanding. More than 30,000 nationally shared ATMs are now on-line.

TABLE 8
PERCENTAGE OF PROPRIETARY ATM TRANSACTIONS BY TYPE BY AREA

Area	Cash Withdrawals from Checking ⁺			Cash Withdrawals from Savings [±]		
	1983	1984	1985	1983	1984	1985
Boston	50.5%	47.9%	46.4%	10.1%	12.5%	11.7%
New York	32.8	40.9	43.7	10.0	10.9	11.1
Philadelphia	43.1	45.7	51.0	15.3	14.8	12.9
Pittsburgh	49.1	57.0	51.3	7.6	6.2	11.4
Washington, D.C.	51.0	48.1	53.7	6.5	5.3	5.8
Atlanta	56.5	58.9	49.8	6.8	5.9	4.8
Chicago	64.3	49.8	53.8	5.9	8.8	7.3
Cleveland	41.3	39.2	38.8	13.6	12.5	11.8
Detroit	43.1	44.8	27.8	9.7	11.2	7.7
Minneapolis/St. Paul	55.4	62.3	57.3	11.2	7.3	7.7
St. Louis	53.6	54.7	49.3	4.8	5.4	6.1
Dallas	59.3	57.8	61.9	4.6	3.6	4.0
Houston	56.6	62.2	69.0	4.9	6.3	1.3
Los Angeles	58.4	60.2	62.9	6.7	4.6	5.7
San Francisco	53.7	64.0	62.1	4.6	7.2	9.5
Denver	57.7	31.8	7.2	6.8	14.1	0.3
Average	51.0%	50.3%	48.4%	7.8%	8.5%	8.4%
Median	52.6%	53.8%	53.3%	7.0%	7.8%	7.5%

*No respondents; $\frac{+Q25}{Q34} \times 100$; $\frac{\pm Q26}{Q34} \times 100$; $\frac{\$Q27}{Q34} \times 100$; $\frac{^{\circ}Q28}{Q34} \times 100$;

$\frac{\#Q29}{Q34} \times 100$; $\frac{++Q30}{Q34} \times 100$; $\frac{\$\$Q31}{Q34} \times 100$; $\frac{^{\circ\circ}Q32}{Q34} \times 100$; $\frac{\#\#Q33}{Q34} \times 100$.

Note: The preceding footnotes also pertain to the continuation of Table 8 on the following pages.

TABLE 8 (Continued)

Area	Cash Withdrawals From Credit Cards§			Balance Inquiries°		
	1983	1984	1985	1983	1984	1985
Boston	0.2%	0.2%	0.2%	20.6%	24.1%	25.8%
New York	0.9	0.8	1.4	41.8	32.3	29.3
Philadelphia	1.5	1.0	0.5	15.3	15.6	16.8
Pittsburgh	1.2	0.0	0.8	24.5	9.4	24.3
Washington, D.C.	1.7	1.2	2.2	26.7	23.5	23.4
Atlanta	0.6	0.8	0.8	22.7	23.2	21.1
Chicago	0.7	0.2	0.7	3.8	17.4	10.2
Cleveland	0.9	0.5	0.6	25.5	24.6	21.5
Detroit	0.4	0.3	0.2	22.5	22.8	19.2
Minneapolis/St. Paul	0.6	0.0	0.0	20.1	15.3	14.6
St. Louis	0.9	1.7	1.5	27.4	24.6	24.2
Dallas	0.1	0.3	0.3	26.2	21.6	23.5
Houston	0.0	0.0	0.0	32.0	23.0	24.1
Los Angeles	1.0	1.1	0.6	20.6	17.5	17.5
San Francisco	0.4	1.9	2.2	24.1	16.3	13.8
Denver	2.2	8.9	0.0	20.4	10.4	26.5
Average	0.8%	1.1%	0.9%	24.0%	22.7%	21.2%
Median	0.3%	0.4%	0.3%	22.7%	19.6%	18.7%

Area	Transfers #			Checking Deposits++		
	1983	1984	1985	1983	1984	1985
Boston	2.1%	2.2%	1.7%	12.3%	10.0%	11.3%
New York	2.8	2.9	3.4	8.3	9.2	8.5
Philadelphia	2.8	5.2	3.1	15.3	14.2	11.6
Pittsburgh	1.9	1.4	1.2	11.3	19.2	9.0
Washington, D.C.	2.0	2.3	2.3	9.3	8.9	11.1
Atlanta	1.6	1.4	1.6	8.1	8.5	6.9
Chicago	2.3	3.7	3.4	18.6	12.7	9.7
Cleveland	2.7	1.9	1.6	11.1	13.3	9.4
Detroit	2.7	2.9	2.7	14.4	14.1	10.3
Minneapolis/St. Paul	3.5	3.1	3.3	8.2	11.0	15.5
St. Louis	1.9	1.9	1.5	8.3	9.5	7.8
Dallas	0.9	1.6	0.9	7.2	14.2	8.6
Houston	1.0	1.5	0.7	5.3	6.9	4.8
Los Angeles	1.6	2.8	1.2	9.8	11.3	10.8
San Francisco	1.5	1.5	1.8	14.9	8.5	6.4
Denver	1.8	2.5	1.4	10.3	20.3	1.5
Average	2.0%	2.4%	2.0%	11.2%	10.5%	9.0%
Median	1.9%	2.1%	1.9%	10.7%	10.6%	10.3%

TABLE 8 (Continued)

Area	Savings Deposits\$\$			Bill Payments ^{oo}		
	1983	1984	1985	1983	1984	1985
Boston	2.2%	2.2%	2.0%	0.6%	0.3%	0.4%
New York	2.0	2.3	2.0	0.9	0.4	0.5
Philadelphia	3.4	1.2	2.4	0.5	0.4	0.7
Pittsburgh	1.0	1.3	1.4	0.4	0.4	0.3
Washington, D.C.	0.8	0.7	0.9	0.4	0.5	0.5
Atlanta	0.6	0.4	0.4	0.3	0.2	0.2
Chicago	1.7	2.0	1.5	2.7	1.3	1.0
Cleveland	2.5	2.9	2.2	1.6	2.4	1.3
Detroit	2.1	2.1	1.8	1.1	1.1	0.9
Minneapolis/St. Paul	0.9	0.8	1.7	0.1	0.4	0.0
St. Louis	1.4	0.7	0.8	0.9	0.4	0.2
Dallas	0.3	0.5	0.3	0.4	0.4	0.3
Houston	0.2	0.2	0.1	0.0	0.0	0.1
Los Angeles	0.5	0.4	0.5	0.2	0.5	0.3
San Francisco	0.7	0.4	2.4	0.1	0.1	0.1
Denver	0.6	9.5	0.1	0.2	0.3	0.2
Average	1.3%	1.4%	1.4%	0.5%	0.5%	0.5%
Median	0.9%	0.8%	0.8%	0.3%	0.3%	0.3%

Area	Other ATM Transactions##		
	1983	1984	1985
Boston	1.4%	0.7%	0.6%
New York	0.5	0.3	0.1
Philadelphia	2.8	2.0	1.1
Pittsburgh	3.0	5.0	0.3
Washington, D.C.	1.6	9.6	0.1
Atlanta	2.8	0.7	0.4
Chicago	0.0	4.0	12.4
Cleveland	0.8	2.8	3.0
Detroit	4.0	0.7	1.5
Minneapolis/St. Paul	0.0	0.0	0.0
St. Louis	0.8	1.1	8.5
Dallas	1.0	0.1	0.2
Houston	0.0	0.0	0.0
Los Angeles	1.2	1.5	0.8
San Francisco	0.0	0.1	0.0
Denver	0.0	2.2	0.1
Average	1.4%	2.6%	1.3%
Median	0.0%	0.0%	0.0%

TABLE 9
PERCENTAGE OF INTERCHANGE ATM TRANSACTIONS BY TYPE BY AREA

Area	Cash Withdrawals from Checking ⁺			Cash Withdrawals from Savings [†]			Cash Withdrawals from Credit Cards [§]		
	1983	1984	1985	1983	1984	1985	1983	1984	1985
Boston	68.0%	60.0%	55.5%	2.4%	13.7%	14.8%	0.0%	0.1%	0.6%
New York	69.2	44.8	56.4	7.7	8.9	7.4	0.0	1.9	1.6
Philadelphia	49.1	50.9	51.3	14.7	9.3	18.2	2.1	9.9	1.1
Pittsburgh	54.9	63.9	56.0	10.1	12.6	14.2	0.4	0.0	0.8
Washington, D.C.	76.1	77.4	71.8	10.3	9.4	9.9	0.5	1.3	5.1
Atlanta	58.6	71.6	41.0	10.5	5.6	5.2	0.1	1.1	1.3
Chicago	42.0	56.0	50.2	9.4	8.6	6.3	0.6	0.0	0.2
Cleveland	52.0	46.7	29.7	21.5	13.7	9.6	0.0	0.5	0.6
Detroit	45.8	71.8	23.7	9.8	8.9	14.1	0.1	0.2	0.4
Minneapolis/St. Paul	59.2	88.6	71.7	10.0	2.7	12.3	1.4	9.0	6.0
St. Louis	71.6	70.2	73.1	5.7	1.9	5.5	0.1	0.6	2.0
Dallas	51.6	67.1	66.0	5.6	10.3	8.9	0.1	0.9	1.1
Houston	61.1	65.0	78.1	4.4	6.1	2.6	0.0	13.3	0.6
Los Angeles	68.0	72.2	45.6	12.4	4.2	10.8	0.8	1.2	3.7
San Francisco	68.1	71.3	30.5	8.0	11.4	6.0	0.3	1.1	0.2
Denver	56.4	23.9	8.4	8.6	12.3	0.0	3.3	6.2	2.1
Average	53.8%	59.7%	45.2%	9.6%	9.0%	10.1%	0.7%	2.7%	1.2%
Median	58.4%	60.0%	60.0%	8.9%	10.0%	10.0%	0.0%	0.0%	0.0%

$$\frac{+Q41}{Q50} \times 100; \frac{+Q42}{Q50} \times 100; \frac{\$Q43}{Q50} \times 100; \frac{^{\circ}Q44}{Q50} \times 100; \frac{\#Q45}{Q50} \times 100; \frac{++Q46}{Q50} \times 100;$$

$$\frac{\$Q47}{Q50} \times 100; \frac{^{\circ\circ}Q48}{Q50} \times 100; \frac{\#\#Q49}{Q50} \times 100.$$

Note: The preceding footnotes also pertain to the continuation of Table 9 on the following page.

TABLE 9 (Continued)

Area	Balance Inquiries ^o			Transfers #			Checking Deposits ⁺⁺		
	1983	1984	1985	1983	1984	1985	1983	1984	1985
Boston	24.4%	21.4%	23.4%	1.0%	1.5%	1.5%	3.3%	2.7%	3.5%
New York	23.1	30.2	31.6	0.0	0.6	0.2	0.0	0.0	0.4
Philadelphia	22.6	15.0	15.2	1.5	1.2	1.6	7.9	6.1	5.3
Pittsburgh	24.4	9.4	19.6	1.9	0.0	1.4	7.4	0.0	6.6
Washington, D.C.	13.1	11.3	12.8	0.0	0.1	0.0	0.0	0.5	0.5
Atlanta	25.7	12.6	13.6	0.6	0.3	0.3	3.8	0.3	0.5
Chicago	3.4	14.7	12.2	3.2	2.7	2.2	10.6	13.0	9.8
Cleveland	1.2	18.0	23.8	3.4	1.3	1.4	18.9	13.2	8.1
Detroit	6.2	0.0	6.7	2.0	2.6	1.5	22.5	15.5	5.2
Minneapolis/St. Paul	18.0	2.0	8.8	3.1	0.6	1.2	7.3	6.0	0.0
St. Louis	5.8	16.7	7.7	0.9	0.6	1.6	15.4	9.8	9.0
Dallas	25.9	18.8	23.8	1.0	0.6	0.2	8.5	2.2	0.0
Houston	34.2	15.1	18.7	0.3	0.5	0.0	0.0	0.0	0.0
Los Angeles	15.3	9.2	31.9	1.7	0.3	1.1	0.4	3.2	5.1
San Francisco	2.2	13.6	6.7	7.8	0.5	0.3	12.7	2.0	0.0
Denver	19.9	14.4	19.5	1.0	3.1	0.8	10.2	15.4	1.2
Average	19.9%	14.6%	17.5%	1.5%	1.2%	1.0%	8.6%	6.7%	3.8%
Median	15.4%	10.0%	20.0%	0.6%	0.0%	0.0%	3.9%	0.0%	0.0%

Area	Savings Deposits ^{\$\$}			Bill Payments ^{oo}			Other ATM Transactions		
	1983	1984	1985	1983	1984	1985	1983	1984	1985
Boston	0.9%	0.6%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
New York	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Philadelphia	1.5	0.6	1.4	0.4	0.0	0.0	0.2	6.9	5.9
Pittsburgh	0.9	0.0	1.4	0.0	0.0	0.0	0.0	14.1	0.0
Washington, D.C.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Atlanta	0.6	0.0	0.0	0.1	0.0	0.0	0.0	8.6	1.2
Chicago	1.8	1.5	1.1	0.6	0.0	0.0	28.4	3.5	3.2
Cleveland	3.0	2.3	1.7	0.0	0.0	0.0	0.0	4.3	0.0
Detroit	1.2	1.0	1.5	0.2	0.0	0.0	12.2	0.0	2.7
Minneapolis/St. Paul	0.8	1.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
St. Louis	0.5	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Dallas	0.4	2.0	0.0	0.1	0.0	0.0	6.8	0.0	0.0
Houston	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Los Angeles	0.0	0.0	0.6	0.0	0.0	1.2	1.4	9.7	0.0
San Francisco	0.9	0.1	1.4	0.0	0.0	0.0	0.0	0.0	0.0
Denver	0.6	10.0	0.0	0.0	0.0	0.0	0.0	14.6	3.8
Average	0.8%	1.2%	0.8%	0.2%	0.0%	0.1%	4.9%	4.6%	1.5%
Median	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

TABLE 10

AVERAGE DOLLAR VALUE OF PROPRIETARY ATM TRANSACTIONS BY AREA

Area	Cash Withdrawals from Checking ⁺			Cash Withdrawals from Savings [±]		
	1983	1984	1985	1983	1984	1985
Boston	\$52	\$59	\$59	\$54	\$ 51	\$52
New York	59	72	68	59	72	70
Philadelphia	61	58	55	58	56	58
Pittsburgh	47	52	47	45	50	42
Washington, D.C.	42	46	33	50	54	55
Atlanta	32	40	38	67	47	49
Chicago	45	54	49	37	66	58
Cleveland	32	50	48	31	49	47
Detroit	53	53	55	48	48	64
Minneapolis/St. Paul	*	34	*	*	34	*
St. Louis	37	42	41	43	50	49
Dallas	25	32	33	39	41	44
Houston	44	41	34	53	54	52
Los Angeles	45	56	32	49	116	55
San Francisco	48	44	29	51	46	30
Denver	24	37	37	31	25	37
Average	\$43	\$50	\$44	\$52	\$ 56	\$52
Median	\$47	\$48	\$48	\$50	\$ 51	52

*No respondents; $\frac{+Q35}{Q25}$; $\frac{±Q36}{Q26}$; $\frac{\$Q37}{Q27}$; $\frac{°Q38}{Q30}$; $\frac{\#Q39}{Q31}$; $\frac{±±Q40}{Q32}$.

Note: The preceding footnotes also pertain to the continuation of Table 10 on the following page.

TABLE 10 (Continued)

Area	Cash Withdrawals from Credit Cards§§			Checking Deposits°		
	1983	1984	1985	1983	1984	1985
Boston	\$ 55	\$ 74	\$ 71	\$206	\$315	\$387
New York	63	78	79	552	526	863
Philadelphia	69	65	67	489	469	376
Pittsburgh	53	0	57	353	512	417
Washington, D.C.	57	64	93	383	360	330
Atlanta	108	61	58	360	335	349
Chicago	53	65	72	795	527	698
Cleveland	32	57	60	252	365	379
Detroit	59	54	57	365	401	427
Minneapolis/St. Paul	*	*	*	*	404	*
St. Louis	69	37	48	302	362	176
Dallas	0	12	10	120	342	340
Houston	0	0	0	339	332	449
Los Angeles	52	60	57	375	288	332
San Francisco	53	43	31	473	2900	387
Denver	27	24	43	173	123	373
Average	\$ 63	\$ 53	\$ 58	\$399	\$523	\$422
Median	\$ 54	\$ 62	\$ 63	\$ 46	\$ 48	\$ 47

Area	Savings Deposits #			Bill Payments††		
	1983	1984	1985	1983	1984	1985
Boston	\$211	\$265	\$236	\$109	\$170	\$152
New York	271	437	372	127	298	219
Philadelphia	360	293	390	596	229	174
Pittsburgh	233	188	290	175	173	221
Washington, D.C.	344	423	480	128	97	90
Atlanta	264	458	396	136	188	303
Chicago	282	564	681	100	143	385
Cleveland	158	229	238	100	151	142
Detroit	260	214	394	78	428	516
Minneapolis/St. Paul	*	526	*	*	204	*
St. Louis	353	335	294	111	149	363
Dallas	176	295	267	2	35	32
Houston	235	83	164	32	99	413
Los Angeles	588	669	382	120	168	157
San Francisco	470	361	81	118	111	301
Denver	88	45	261	0	223	175
Average	\$309	\$310	\$466	\$152	\$175	\$230
Median	\$256	\$ 51	\$ 52	\$ 56	\$ 65	\$ 66

TABLE 11
AVERAGE DOLLAR VALUE OF INTERCHANGE ATM TRANSACTIONS BY AREA

Area	Cash Withdrawals from Checking ⁺			Cash Withdrawals from Savings [±]			Cash Withdrawals from Credit Cards [§]		
	1983	1984	1985	1983	1984	1985	1983	1984	1985
Boston	\$47	\$52	\$54	\$54	\$46	\$55	\$ *	\$49	\$73
New York	38	50	38	18	44	31	*	79	87
Philadelphia	50	56	51	56	48	54	55	54	65
Pittsburgh	39	37	37	39	34	39	65	100	64
Washington, D.C.	41	43	43	49	43	46	45	35	62
Atlanta	36	34	37	21	37	41	95	52	43
Chicago	9	46	43	11	72	43	7	63	94
Cleveland	40	42	37	39	48	38	0	59	79
Detroit	64	47	47	57	58	49	60	65	65
Minneapolis/St. Paul	*	32	*	*	33	*	*	*	*
St. Louis	38	40	36	43	43	31	36	57	22
Dallas	38	39	37	29	28	17	44	53	60
Houston	56	43	36	51	69	55	0	97	77
Los Angeles	50	78	57	54	74	58	51	22	63
San Francisco	61	58	*	57	70	*	35	58	*
Denver	33	58	*	32	29	*	48	54	*
Average	\$43	\$45	\$41	\$44	\$45	\$43	\$51	\$54	\$57
Median	\$42	\$43	\$44	\$44	\$46	\$46	\$52	\$55	\$67

Area	Checking Deposits ^o			Savings Deposits #			Bill Payments ⁺⁺		
	1983	1984	1985	1983	1984	1985	1983	1984	1985
Boston	\$479	\$273	\$414	\$285	\$246	\$434	\$ *	\$ *	\$163
New York	*	*	266	*	*	*	*	*	*
Philadelphia	372	381	412	269	367	334	135	135	242
Pittsburgh	235	*	272	199	*	256	*	*	*
Washington, D.C.	*	378	568	*	*	*	*	62	*
Atlanta	261	423	282	150	165	198	264	156	*
Chicago	395	442	483	111	401	359	61	*	221
Cleveland	267	290	254	240	234	214	204	82	151
Detroit	1597	413	420	360	344	336	153	*	259
Minneapolis/St. Paul	*	545	*	*	527	*	*	*	*
St. Louis	419	397	322	176	412	43	385	96	173
Dallas	490	458	*	316	280	*	158	*	*
Houston	*	*	*	*	*	*	*	*	*
Los Angeles	856	1195	431	*	*	525	*	*	178
San Francisco	1814	350	409	609	10	*	*	*	*
Denver	486	58	*	365	30	*	*	*	*
Average	\$709	\$342	\$385	\$264	\$167	\$271	\$135	\$109	\$180
Median	\$ 37	\$ 37	\$ 36	\$ 34	\$ 39	\$ 39	\$ 30	\$ 22	\$ 22

*No respondents; $\frac{+Q51}{Q41} \times 100$; $\frac{+Q52}{Q42} \times 100$; $\frac{Q53}{Q43} \times 100$; $\frac{oQ54}{Q46} \times 100$; $\frac{\#Q55}{Q47} \times 100$; $\frac{++Q56}{Q48} \times 100$.

TABLE 12
AVERAGE MONTHLY PROPRIETARY TRANSACTIONS PER ATM UNIT BY AREA

Area	Cash Withdrawals from Checking ⁺			Cash Withdrawals from Savings [±]		
	1983	1984	1985	1983	1984	1985
Boston	2,342.6	2,329.3	2,015.2	467.6	610.3	506.5
New York	1,583.1	1,924.3	2,504.8	491.1	557.1	639.7
Philadelphia	1,739.6	2,094.9	1,841.0	591.0	563.6	466.0
Pittsburgh	2,222.1	3,098.6	2,282.6	345.9	335.6	507.0
Washington, D.C.	2,981.6	3,706.3	1,750.7	382.3	378.0	187.5
Atlanta	3,576.4	2,890.7	2,517.7	431.6	290.6	193.9
Chicago	1,617.9	1,651.7	1,992.4	148.7	293.1	269.1
Cleveland	2,605.3	2,688.4	2,120.2	857.6	855.9	645.5
Detroit	1,103.6	1,149.4	567.7	249.0	286.7	157.4
Minneapolis/St. Paul	2,106.4	889.3	2,197.1	425.6	104.1	293.3
St. Louis	6,234.0	2,279.6	2,066.2	553.7	225.9	242.6
Dallas	2,013.0	2,777.1	2,420.6	157.3	173.1	155.2
Houston	2,358.0	2,070.0	2,046.6	203.1	208.7	37.8
Los Angeles	3,576.9	3,098.1	3,291.6	408.4	234.9	297.1
San Francisco	3,116.1	3,165.0	2,414.9	264.4	356.6	369.8
Denver	2,925.9	1,815.4	304.1	344.1	803.6	13.7
Average	2,631.4	2,351.8	2,018.6	395.1	392.4	345.6
Median	2,620.7	2,388.0	1,889.0	296.1	315.0	238.7

*No respondents; $\frac{+Q25}{Q72}$; $\frac{+Q26}{Q72}$; $\frac{\$Q27}{Q72}$; $\frac{^{\circ}Q28}{Q72}$;

$\frac{\#Q29}{Q72}$; $\frac{++Q30}{Q72}$; $\frac{\$\$Q31}{Q72}$; $\frac{^{\circ\circ}Q32}{Q72}$; $\frac{\#\#Q33}{Q72}$; $\frac{^{*}Q34}{Q72}$.

Note: The preceding footnotes also pertain to the continuation of Table 12 on the following pages.

TABLE 12 (Continued)

Area	Cash Withdrawals from Credit Cards§§			Balance Inquiries°		
	1983	1984	1985	1983	1984	1985
Boston	6.9	8.6	8.4	954.9	1,170.4	1,117.9
New York	45.9	51.0	82.0	2,028.4	1,580.6	1,682.6
Philadelphia	13.3	30.4	18.2	779.6	827.1	607.4
Pittsburgh	48.0	0.0	34.7	1,110.9	513.4	1,080.0
Washington, D.C.	101.1	84.9	72.9	1,562.1	1,534.7	761.9
Atlanta	39.4	37.7	44.0	1,440.9	1,139.1	1,052.5
Chicago	16.3	7.7	25.4	95.1	576.4	376.4
Cleveland	55.3	32.1	32.1	1,605.9	1,689.0	1,173.5
Detroit	7.7	8.6	3.2	578.1	585.0	391.6
Minneapolis/St. Paul	27.0	0.0	0.0	763.7	218.6	558.8
St. Louis	95.6	69.4	65.3	3,188.1	1,026.0	1,024.6
Dallas	3.0	13.3	11.7	889.3	1,040.1	918.9
Houston	0.0	0.0	0.0	1,335.9	764.1	715.6
Los Angeles	62.1	57.9	30.0	1,260.4	903.0	914.0
San Francisco	22.3	94.3	87.1	1,398.0	804.4	536.9
Denver	109.3	510.0	0.1	1,033.7	595.7	1,121.7
Average	40.8	62.9	37.1	1,251.6	935.5	880.9
Median	18.4	12.0	8.0	960.0	801.0	618.6

Area	Transfers #			Checking Deposits++		
	1983	1984	1985	1983	1984	1985
Boston	97.7	105.9	73.7	570.9	484.3	490.4
New York	134.1	161.1	193.5	406.7	497.1	488.3
Philadelphia	131.1	119.6	111.3	496.3	492.9	418.0
Pittsburgh	86.1	78.4	52.3	511.3	1,043.6	402.3
Washington, D.C.	117.9	166.3	76.4	541.3	635.6	361.5
Atlanta	100.7	68.1	80.0	513.4	419.1	362.0
Chicago	59.1	121.7	126.1	468.4	419.1	359.5
Cleveland	169.7	131.6	89.8	699.0	910.3	512.1
Detroit	70.3	73.7	55.4	369.9	360.4	210.1
Minneapolis/St. Paul	131.6	44.1	125.1	310.7	156.4	592.6
St. Louis	225.9	80.1	63.2	963.9	396.4	315.3
Dallas	29.6	76.3	35.1	243.4	681.4	336.6
Houston	39.9	49.3	19.6	222.4	228.4	141.0
Los Angeles	100.3	146.6	60.7	599.1	584.1	563.0
San Francisco	89.6	75.4	70.1	864.9	420.0	250.8
Denver	91.3	143.1	58.0	523.3	1,158.0	63.9
Average	104.7	102.6	82.8	519.1	555.5	376.4
Median	77.6	81.4	56.8	485.6	453.4	362.9

TABLE 12 (Continued)

Area	Savings Deposits\$\$			Bill Payments ^{oo}		
	1983	1984	1985	1983	1984	1985
Boston	102.9	106.7	85.7	27.0	14.6	18.2
New York	99.4	123.0	114.8	34.3	23.6	27.6
Philadelphia	123.9	96.4	86.0	24.9	24.4	25.0
Pittsburgh	45.0	71.6	63.7	19.3	21.4	11.8
Washington, D.C.	44.1	40.7	30.3	25.3	31.3	15.6
Atlanta	39.4	21.4	17.4	15.0	9.0	8.7
Chicago	41.6	66.9	56.6	69.4	42.9	37.2
Cleveland	156.9	198.4	120.9	104.1	162.4	73.5
Detroit	54.0	54.4	37.2	28.7	27.9	17.5
Minneapolis/St. Paul	35.1	10.7	65.4	3.0	5.6	0.0
St. Louis	164.6	27.4	30.0	107.6	18.4	8.6
Dallas	10.3	22.7	10.6	16.3	18.9	12.5
Houston	7.3	5.6	3.4	1.3	1.3	1.6
Los Angeles	32.6	22.7	23.6	13.7	24.9	14.3
San Francisco	39.0	20.1	92.1	4.3	5.6	5.0
Denver	30.9	540.0	3.1	10.7	16.3	6.5
Average	64.2	89.3	60.4	31.6	28.0	20.6
Median	37.7	30.0	28.1	15.4	11.1	9.6

Area	Other ATM Transactions##			Total ATM Transactions***		
	1983	1984	1985	1983	1984	1985
Boston	66.0	36.0	23.9	4,636.3	4,866.0	4,340.0
New York	25.3	21.9	3.8	4,848.4	5,154.0	5,737.1
Philadelphia	160.7	159.0	39.3	4,060.3	4,410.0	3,612.1
Pittsburgh	137.1	271.7	14.5	4,525.3	5,434.3	4,448.8
Washington, D.C.	92.1	849.9	2.4	5,848.7	7,427.1	3,259.1
Atlanta	178.3	35.1	18.6	6,334.7	4,910.6	5,052.7
Chicago	0.0	134.1	457.0	2,517.0	3,313.7	3,700.0
Cleveland	52.7	194.6	166.6	6,306.0	6,863.1	5,470.1
Detroit	102.0	17.1	30.9	2,564.1	2,563.3	2,043.7
Minneapolis/St. Paul	0.0	0.0	0.0	3,802.7	1,428.4	3,832.3
St. Louis	90.4	44.6	373.1	11,623.7	4,168.3	4,188.9
Dallas	35.1	3.4	8.9	3,396.9	4,806.4	3,910.1
Houston	0.0	0.0	0.0	4,168.3	3,327.0	2,965.6
Los Angeles	70.7	77.1	39.7	6,124.7	5,149.7	5,234.0
San Francisco	1.3	4.3	1.9	5,799.4	4,945.7	3,890.8
Denver	0.0	128.1	6.0	5,069.1	5,709.0	4,227.7
Average	63.2	123.6	53.9	5,101.6	4,654.8	4,172.0
Median	0.0	0.0	0.0	6,227.1	4,493.6	3,869.1

TABLE 13
AVERAGE MONTHLY INTERCHANGE TRANSACTIONS PER ATM UNIT BY AREA

Area	Cash Withdrawals Checking ⁺			Cash Withdrawals Savings [‡]			Cash Withdrawals Credit Cards [§]		
	1983	1984	1985	1983	1984	1985	1983	1984	1985
Boston	70.3	192.0	253.5	2.6	43.7	67.3	0.0	0.4	2.6
New York	0.0	17.6	269.7	0.0	3.4	3.5	0.0	0.9	7.7
Philadelphia	678.0	713.1	878.6	203.6	130.7	311.7	28.7	138.9	19.2
Pittsburgh	228.9	656.6	1,074.8	42.0	129.0	272.9	1.7	0.0	14.7
Washington, D.C.	102.4	222.0	169.8	13.7	25.7	23.3	0.4	3.9	12.0
Atlanta	62.1	247.3	302.2	11.1	19.3	37.0	0.0	0.9	10.5
Chicago	482.6	1,034.6	996.6	108.0	158.1	125.8	6.4	0.9	4.0
Cleveland	23.6	317.1	199.9	9.9	93.4	65.0	0.0	3.4	4.4
Detroit	338.6	419.6	99.5	72.4	51.9	59.0	0.9	1.3	1.7
Minneapolis/St. Paul	2,513.6	2,301.4	888.5	425.6	70.7	152.7	61.3	0.0	74.1
St. Louis	287.6	363.9	465.9	23.1	9.9	34.6	0.4	3.4	12.6
Dallas	2,337.0	1,562.6	1,332.5	252.4	239.1	179.4	5.6	20.1	22.9
Houston	334.3	369.9	171.3	24.4	35.1	5.8	0.0	75.9	1.4
Los Angeles	309.9	101.6	462.6	56.6	6.0	109.1	0.0	1.7	37.2
San Francisco	15.9	6.9	197.5	1.7	1.3	39.0	0.4	0.0	1.6
Denver	103.3	396.4	59.0	15.9	--	0.0	6.0	103.3	14.8
Average	493.0	557.7	343.8	78.9	67.8	77.1	7.0	22.2	9.4
Median	9.0	140.1	262.1	0.0	6.0	30.8	0.0	0.0	2.4

Area	Balance Inquiries [°]			Transfers #			Checking Deposits ⁺⁺		
	1983	1984	1985	1983	1984	1985	1983	1984	1985
Boston	25.3	68.6	106.4	0.9	4.7	6.8	3.4	8.6	15.8
New York	0.0	12.0	151.3	0.0	0.4	0.7	0.0	0.0	2.1
Philadelphia	310.7	210.0	260.4	21.0	17.1	26.9	109.7	85.3	90.5
Pittsburgh	101.6	96.9	375.8	8.1	0.0	26.7	30.9	0.0	126.1
Washington, D.C.	17.6	29.1	30.2	0.0	0.4	0.0	0.0	1.7	1.1
Atlanta	27.4	43.3	98.3	0.9	0.9	2.1	3.9	0.9	4.2
Chicago	40.3	272.6	243.1	36.9	50.1	42.9	122.1	240.4	193.7
Cleveland	0.4	122.6	160.1	1.7	9.0	9.1	8.6	89.6	54.7
Detroit	45.9	0.0	28.0	14.6	15.0	6.3	165.9	90.4	21.7
Minneapolis/St. Paul	763.7	51.4	109.6	131.6	16.3	14.5	310.7	155.6	0.0
St. Louis	22.7	86.1	57.3	3.9	3.4	9.4	62.1	50.6	56.6
Dallas	1,172.6	437.1	480.5	45.0	12.9	3.8	384.0	52.3	0.0
Houston	186.0	85.7	41.0	1.7	3.0	0.0	0.0	0.0	0.0
Los Angeles	69.9	12.9	324.0	7.7	0.4	11.5	1.7	4.3	51.7
San Francisco	0.4	1.3	43.5	1.7	0.0	1.7	3.0	0.0	0.1
Denver	36.4	238.3	137.1	1.7	50.6	5.6	18.9	255.4	8.7
Average	176.3	110.5	132.9	17.3	11.5	7.7	76.6	64.7	29.0
Median	0.0	20.6	88.8	0.0	0.9	3.1	0.0	0.0	0.0

⁺Q41; [‡]Q42; [§]Q43; [°]Q44; [#]Q45; ⁺⁺Q46; ^{§§}Q47; ^{°°}Q48; ^{##}Q49; ^{***}Q50
Q72 Q72 Q72 Q72 Q72 Q72 Q72 Q72 Q72

Note: The preceding footnotes also pertain to the continuation of Table 13 on the following page.

TABLE 13 (Continued)

Area	Savings Deposits§§			Bill Payments°°		
	1983	1984	1985	1983	1984	1985
Boston	0.9	1.7	3.2	0.0	0.0	0.1
New York	0.0	0.0	0.0	0.0	0.0	0.0
Philadelphia	21.4	8.6	24.2	5.6	0.4	0.3
Pittsburgh	3.9	0.0	26.7	0.0	0.0	0.0
Washington, D.C.	0.0	0.0	0.0	0.0	0.0	0.0
Atlanta	0.9	0.0	0.3	0.0	0.0	0.0
Chicago	21.0	27.0	21.3	6.4	0.0	0.1
Cleveland	1.3	15.4	11.6	0.0	0.0	0.0
Detroit	9.0	6.0	6.3	1.7	0.0	0.1
Minneapolis/St. Paul	35.1	3.4	0.0	3.0	0.0	0.0
St. Louis	1.7	0.9	6.3	0.0	0.0	0.1
Dallas	17.1	6.0	0.0	5.6	0.0	0.0
Houston	0.0	0.0	0.0	0.0	0.0	0.0
Los Angeles	0.0	0.0	6.0	0.0	0.0	12.4
San Francisco	0.0	0.0	9.1	0.0	0.0	0.0
Denver	0.9	166.3	0.0	0.0	0.0	0.0
Average	7.1	14.7	6.5	1.4	0.0	0.9
Median	0.0	0.0	0.0	0.0	0.0	0.0

Area	Other ATM Transactions##			Total ATM Transactions***		
	1983	1984	1985	1983	1984	1985
Boston	0.0	0.0	0.0	103.3	320.1	455.6
New York	0.0	0.0	0.0	0.4	42.4	478.5
Philadelphia	3.4	97.3	100.6	1,382.1	1,401.4	1,712.4
Pittsburgh	0.0	144.9	0.0	417.4	1,024.3	1,917.8
Washington, D.C.	0.0	0.0	0.0	134.6	282.4	236.4
Atlanta	0.0	29.6	9.4	106.3	345.9	753.8
Chicago	326.1	64.3	63.1	1,149.4	1,848.4	1,985.8
Cleveland	0.0	29.1	0.0	45.4	679.7	674.0
Detroit	90.0	0.0	11.5	739.3	584.1	419.5
Minneapolis/St. Paul	0.0	0.0	0.0	4,244.1	2,598.4	1,239.3
St. Louis	0.0	0.0	0.0	401.6	518.1	621.0
Dallas	309.0	0.0	0.4	4,528.3	2,330.6	2,020.1
Houston	0.0	0.0	0.0	546.9	569.1	219.4
Los Angeles	6.4	13.7	0.0	456.0	140.6	1,014.6
San Francisco	0.0	0.0	0.0	23.1	9.9	647.5
Denver	0.0	241.7	27.0	183.4	1,656.4	701.9
Average	45.9	38.8	11.3	903.9	897.0	761.9
Median	0.0	0.0	0.0	27.0	1,661.1	555.8

TABLE 14
NUMBER OF MONTHLY PROPRIETARY TRANSACTIONS PER ATM LOCATION BY AREA

Area	Lobby+			Main Office Units						Drive-up°		
	1983	1984	1985	Vestibule±			Through the Wall§			1983	1984	1985
Boston	552.9	188.6	5,080.5	6,882.9	0.0	4,458.6	0.0	857.1	8,034.0	0.0	0.0	0.0
New York	1,101.4	3,287.1	3,352.4	1,255.7	3,720.0	2,980.3	4,877.1	9,531.4	7,334.5	0.0	0.0	0.0
Philadelphia	1,842.9	6,754.3	2,300.0	7,242.9	0.0	3,798.5	3,355.7	2,215.7	2,490.9	0.0	0.0	0.0
Pittsburgh	968.6	0.0	1,814.3	0.0	0.0	0.0	3,544.3	0.0	3,224.5	0.0	0.0	0.0
Washington, D.C.	1,247.1	3,835.7	0.0	0.0	0.0	0.0	244.3	0.0	0.0	0.0	5,875.7	0.0
Atlanta	2,747.1	4,110.0	2,046.4	7,294.3	2,704.3	2,990.0	3,214.3	1,427.1	1,988.0	1,714.3	0.0	335.0
Chicago	3,287.1	1,774.3	1,131.3	0.0	6,951.4	184.0	0.0	552.9	2,303.7	0.0	0.0	0.0
Cleveland	728.6	2,820.0	1,824.4	2,798.6	1,911.4	4,365.0	3,904.3	3,484.3	3,646.7	0.0	0.0	0.0
Detroit	1,478.6	1,084.3	722.3	3,060.0	3,227.1	4,750.3	4,761.4	1,624.3	0.0	0.0	0.0	0.0
Minneapolis/St. Paul	0.0	1,165.7	2,646.3	0.0	0.0	3,511.7	0.0	1,662.9	3,654.0	0.0	0.0	2,782.0
St. Louis	1,170.0	325.7	932.3	4,551.4	805.7	1,852.8	2,691.4	1,320.0	733.3	0.0	0.0	0.0
Dallas	1,787.1	1,941.4	2,005.1	5,670.0	3,368.6	4,497.6	4,341.4	3,252.9	3,885.1	2,747.1	2,014.3	3,011.0
Houston	1,607.1	0.0	2,464.5	0.0	0.0	2,295.2	0.0	0.0	0.0	0.0	0.0	1,595.0
Los Angeles	3,492.9	3,964.3	2,269.3	0.0	0.0	0.0	10,371.4	10,637.1	1,535.0	0.0	0.0	0.0
San Francisco	668.6	1,041.4	3,639.8	13,547.1	6,985.7	2,467.3	1,075.7	1,924.3	2,146.3	0.0	0.0	0.0
Denver	852.9	1,195.7	1,602.2	330.0	2,764.3	0.0	664.3	0.0	0.0	3,565.7	3,822.9	2,178.0
Average	1,470.8	2,093.0	1,933.2	3,289.6	2,027.4	3,445.5	2,690.4	2,405.6	2,448.2	501.7	732.1	2,087.5
Median	904.3	1,444.3	1,766.2	3,068.6	720.0	3,267.0	728.6	612.9	2,168.0	0.0	0.0	1,595.0

+Q121, ±Q122, §Q123, °Q124, #Q125, ++Q126, ++Q127, §§Q128, °°Q129, ##Q130, +++Q131,
Q57, Q58, Q59, Q60, Q61, Q62, Q63, Q64, Q65, Q66, Q67;

+++Q132, §§§Q133, °°°Q134, ###Q135, ++++Q136
Q68, Q69, Q70, Q71, Q72.

Note: The preceding footnotes also pertain to the continuation of Table 14 on the following pages.

TABLE 14 (Continued)

Area	Lobby#			Branch Office Units						Drive-up\$\$\$		
	1983	1984	1985	Vestibule++		Through-the-Wall++				1983	1984	1985
Boston	120.0	471.4	949.5	1,727.1	175.7	3,632.5	557.1	351.4	2,953.0	351.4	544.3	3,146.1
New York	540.0	968.6	1,350.7	2,207.1	4,062.9	4,757.7	6,158.6	5,434.3	8,114.8	5,434.3	4,097.1	3,354.5
Philadelphia	34.3	1,084.3	1,209.3	1,902.9	6,162.9	3,128.6	3,570.0	2,466.3	3,302.2	2,464.3	1,620.0	3,048.0
Pittsburgh	1,508.6	0.0	658.4	0.0	0.0	0.0	2,610.0	762.9	3,212.2	762.9	0.0	3,782.9
Washington, D.C.	2,991.4	420.0	0.0	1,590.0	5,087.1	0.0	715.7	2,652.9	0.0	2,652.9	2,207.1	0.0
Atlanta	334.3	814.3	1,012.2	7,765.7	6,420.0	4,153.7	5,164.3	2,562.9	2,235.1	2,562.9	2,250.0	1,862.4
Chicago	1,277.1	2,434.3	1,401.8	0.0	1,817.1	2,248.0	2,614.3	4,435.7	3,372.4	4,435.7	557.1	2,275.2
Cleveland	698.6	1,757.1	620.8	2,271.4	5,284.3	4,850.0	2,357.1	2,657.1	3,206.3	2,657.1	4,770.0	1,931.1
Detroit	0.0	34.3	433.6	3,338.6	818.6	426.4	1,088.6	1,937.1	1,868.4	1,937.1	3,617.1	1,052.7
Minneapolis/St. Paul	0.0	0.0	0.0	0.0	780.0	3,206.5	0.0	0.0	4,585.0	0.0	0.0	1,302.0
St. Louis	1,778.6	360.0	558.1	4,542.9	2,738.6	2,557.3	1,851.4	4,041.4	4,272.0	4,041.4	2,451.4	4,760.0
Dallas	0.0	1,765.7	999.3	0.0	3,180.0	3,331.0	68.6	4,435.7	7,296.6	4,435.7	3,244.3	2,834.1
Houston	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Los Angeles	848.6	822.9	342.2	0.0	0.0	0.0	2,117.1	1,602.9	1,255.4	1,602.9	1,007.1	0.0
San Francisco	1,551.4	471.4	735.1	0.0	6,664.3	850.0	878.6	2,640.0	4,116.5	2,640.0	1,692.9	1,772.4
Denver	0.0	591.4	0.0	158.6	0.0	1,399.0	0.0	6,214.3	0.0	6,214.3	0.0	0.0
Average	730.2	749.7	838.0	1,594.0	2,699.5	2,842.7	1,859.5	2,637.1	2,537.2	2,637.1	1,753.7	1,894.0
Median	0.0	480.0	523.0	1,667.1	1,877.1	3,241.0	428.6	1,774.3	2,502.6	1,191.4	814.3	2,632.1

TABLE 14 (Continued)

Area	Off-Premise Units											
	Free-Standing ^{oo}			University/ College ^{##}			Shopping Center ⁺⁺⁺			Grocery/ Retail Store ⁺⁺⁺		
	1983	1984	1985	1983	1984	1985	1983	1984	1985	1983	1984	1985
Boston	2,494.3	0.0	3,738.1	0.0	0.0	2,331.3	0.0	381.4	2,267.6	0.0	85.7	187.3
New York	2,892.9	6,664.3	4,901.4	8,682.9	2,472.9	6,080.9	2,417.1	2,472.9	2,498.8	2,991.4	3,261.4	3,947.7
Philadelphia	4,594.3	1,692.9	2,185.9	6,167.1	6,360.0	357.0	6,617.1	1,247.1	1,719.8	1,962.9	3,904.3	4,225.5
Pittsburgh	3,835.7	0.0	131.5	1,251.4	0.0	901.0	0.0	0.0	0.0	407.1	0.0	1,362.0
Washington, D.C.	1,358.6	925.7	0.0	0.0	7,924.3	0.0	0.0	3,561.4	0.0	0.0	6,077.1	0.0
Atlanta	2,031.4	3,565.7	4,316.2	10,975.7	4,260.0	2,786.5	7,560.0	2,922.9	1,367.7	2,974.3	1,954.3	1,181.7
Chicago	0.0	3,570.0	3,636.4	0.0	0.0	1,632.5	0.0	0.0	666.7	604.3	1,067.1	691.9
Cleveland	0.0	1,645.7	3,564.8	0.0	0.0	5,904.0	0.0	3,218.6	4,032.4	0.0	0.0	2,012.1
Detroit	1,225.7	0.0	0.0	0.0	955.7	505.8	1,727.1	0.0	265.0	0.0	0.0	0.0
Minneapolis/St. Paul	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
St. Louis	0.0	407.1	1,887.5	0.0	1,834.3	3,151.7	0.0	1,714.3	2,744.9	0.0	621.4	60.0
Dallas	2,220.0	3,167.1	3,302.0	2,305.7	3,368.6	6,148.0	1,478.6	4,512.9	4,436.7	205.7	0.0	95.9
Houston	0.0	0.0	0.0	0.0	0.0	0.0	312.9	0.0	0.0	0.0	0.0	0.0
Los Angeles	8,327.1	1,658.6	0.0	677.1	647.1	76.9	2,417.1	4,101.4	743.4	0.0	0.0	0.0
San Francisco	3,355.7	7,568.6	0.0	1,170.0	1,384.3	1,472.5	2,417.1	2,982.9	4,457.6	0.0	0.0	484.7
Denver	338.6	3,552.9	701.5	0.0	0.0	0.0	0.0	0.0	0.0	732.9	0.0	0.0
Average	2,042.1	2,151.2	2,419.4	1,951.9	1,825.4	2,301.8	1,559.2	1,694.7	1,960.0	617.4	1,060.7	464.9
Median	1,127.1	1,200.0	1,646.3	1,375.7	1,645.7	1,700.8	0.0	1,487.1	1,482.0	732.9	1,371.4	1,102.5

TABLE 14 (Continued)

Area	Office/Corporate Complex\$\$\$			Off-Premise Units						Total++++		
	1983	1984	1985	Hospital ^{ooo}			Other ^{###}			1983	1984	1985
Boston	30.0	338.6	754.5	0.0	287.1	2,590.9	252.9	0.0	333.4	1,217.1	265.7	2,833.5
New York	1,830.0	407.1	1,354.7	3,441.4	3,518.6	4,137.8	0.0	0.0	958.5	2,751.4	3,278.6	4,025.8
Philadelphia	2,091.4	2,738.6	1,997.0	2,828.6	295.7	994.6	1,405.7	1,877.1	2,207.5	3,000.0	2,850.0	2,740.6
Pittsburgh	471.4	0.0	84.5	681.4	0.0	614.0	0.0	0.0	0.0	1,830.0	0.0	2,660.4
Washington, D.C.	0.0	1,037.1	0.0	0.0	1,208.6	0.0	7,765.7	1,050.0	0.0	964.3	2,832.9	67.1
Atlanta	2,511.4	2,057.1	2,034.3	4,037.1	1,285.7	905.8	0.0	668.6	2,389.1	4,534.3	2,862.9	3,290.1
Chicago	728.6	904.3	765.5	0.0	4,152.9	215.5	1,307.1	2,421.4	0.0	1,770.0	2,280.0	1,894.9
Cleveland	2,040.0	312.9	1,166.2	2,438.6	1,778.6	2,654.9	0.0	0.0	0.0	2,134.3	2931.4	2,991.1
Detroit	617.1	0.0	434.0	801.4	188.6	508.8	0.0	0.0	3,441.0	1,692.9	1,697.1	1,525.0
Minneapolis/St. Paul	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,230.0	0.0	0.0	1,208.6	3,273.5
St. Louis	0.0	2,820.0	667.5	0.0	818.6	893.0	0.0	827.1	1,407.0	2,318.6	2,151.4	2,140.7
Dallas	0.0	4,602.9	3,300.3	895.7	3,368.6	723.0	312.9	0.0	5,130.5	2,185.7	3,767.1	2,991.2
Houston	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	818.6	0.0	2,250.0
Los Angeles	0.0	0.0	0.0	0.0	1,075.7	0.0	0.0	2,948.6	0.0	2,815.7	1,628.6	2,368.2
San Francisco	128.6	0.0	1,630.8	0.0	1,080.0	0.0	0.0	4,131.4	1,697.3	857.1	2,670.0	2,823.9
Denver	1,281.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	334.3	3,942.9	240.5
Average	733.1	951.2	902.7	945.3	1,191.2	1,486.8	690.3	947.1	1,311.6	1,826.5	2,147.9	2,542.2
Median	424.3	711.4	818.0	895.7	818.6	723.7	0.0	1,028.6	635.0	1,474.3	1,684.3	2,656.2

TABLE 15
NUMBER OF MONTHLY INTERCHANGE TRANSACTIONS PER ATM UNIT LOCATION BY AREA

Area	Lobby ⁺			Main Office			Through-the-Wall [§]			Drive-up ^o		
	1983	1984	1985	Vestibule [‡]	1983	1984	1985	1983	1984	1985	1983	1984
Boston	8.6	85.7	63.0	1,071.4	0.0	3,659.1	0.0	0.0	668.5	0.0	0.0	0.0
New York	0.0	8.6	1.2	0.0	25.7	896.8	0.0	21.4	26.0	0.0	0.0	0.0
Philadelphia	1,825.7	484.3	854.1	12.9	0.0	503.5	3,128.6	2,408.6	2,367.7	0.0	0.0	0.0
Pittsburgh	98.6	0.0	0.0	0.0	0.0	0.0	917.1	0.0	0.0	0.0	0.0	0.0
Washington, D.C.	4.3	51.4	0.0	0.0	0.0	0.0	34.3	0.0	0.0	0.0	437.1	0.0
Atlanta	0.0	98.6	16.6	132.9	227.1	0.0	4.3	55.7	380.1	0.0	0.0	95.0
Chicago	270.0	334.3	421.3	0.0	1,230.0	120.9	304.3	797.1	1,709.7	0.0	0.0	0.0
Cleveland	17.1	162.9	160.9	137.1	347.1	613.3	0.0	454.3	8.0	0.0	0.0	0.0
Detroit	115.7	0.0	50.7	0.0	0.0	264.7	1,157.1	0.0	0.0	0.0	0.0	0.0
Minneapolis/St. Paul	0.0	2,455.7	806.7	0.0	3,501.4	1,319.7	0.0	3,501.4	899.7	0.0	0.0	1,214.0
St. Louis	68.6	758.6	51.5	120.0	1,435.7	164.2	85.7	150.0	531.8	0.0	0.0	0.0
Dallas	471.4	1,195.7	427.5	1,230.0	2,014.3	658.4	1,272.9	1,457.1	765.5	1,825.7	2,117.1	612.9
Houston	248.6	0.0	150.0	0.0	0.0	184.0	0.0	0.0	0.0	0.0	0.0	206.0
Los Angeles	0.0	25.7	2,810.0	0.0	0.0	0.0	0.0	94.3	1,497.0	0.0	0.0	0.0
San Francisco	0.0	8.6	32.0	0.0	0.0	304.0	107.1	30.0	0.0	0.0	0.0	0.0
Denver	171.4	651.4	460.2	192.9	1,894.3	0.0	227.1	0.0	0.0	4,932.9	6,060.0	313.0
Average	206.3	395.1	346.2	181.1	667.2	869.1	452.4	560.6	594.3	422.4	538.4	455.1
Median	0.0	0.0	0.0	0.0	0.0	184.0	0.0	0.0	0.0	0.0	0.0	313.0

⁺Q153, [‡]Q154, [§]Q155, ^oQ156, [‡]Q157, ⁺⁺Q158, ^{‡‡}Q159, ^{§§}Q160, ^{oo}Q161, ^{##}Q162, ⁺⁺⁺Q163,
Q57, Q58, Q59, Q60, Q61, Q62, Q63, Q64, Q65, Q66, Q67;

^{‡‡‡}Q164, ^{§§§}Q165, ^{ooo}Q166, ^{###}Q167, ⁺⁺⁺⁺Q168,
Q68, Q69, Q70, Q71, Q72

Note: The preceding footnotes also pertain to the continuation of Table 15 on the following pages.

TABLE 15 (Continued)

Area	Branch Office											
	Lobby#			Vestibule++			Through-the-Wall++			Drive-up\$\$\$		
	1983	1984	1985	1983	1984	1985	1983	1984	1985	1983	1984	1985
Boston	4.3	60.0	15.1	42.9	55.7	126.6	120.0	25.7	578.0	154.3	0.0	293.9
New York	0.0	8.6	39.5	0.0	38.6	449.0	0.0	51.4	347.9	4.3	51.4	176.2
Philadelphia	4.3	171.4	341.6	0.0	132.9	898.0	741.4	1,041.4	1,571.8	865.7	2,507.1	2,687.5
Pittsburgh	38.6	0.0	187.0	38.6	0.0	0.0	462.9	0.0	1,536.1	128.6	0.0	1,682.6
Washington, D.C.	582.9	0.0	0.0	0.0	222.9	0.0	47.1	81.4	0.0	0.0	60.0	0.0
Atlanta	8.6	25.7	85.8	214.3	12.9	0.6	30.0	304.3	304.4	30.0	184.3	118.0
Chicago	377.1	527.1	666.2	0.0	2,395.7	1,614.5	317.1	2,130.0	525.1	0.0	115.7	1,954.3
Cleveland	0.0	201.4	107.9	0.0	861.4	287.7	0.0	394.3	519.0	0.0	124.3	340.0
Detroit	0.0	0.0	39.8	265.7	55.7	100.7	402.9	55.7	435.0	158.6	252.9	160.6
Minneapolis/St. Paul	0.0	0.0	0.0	282.9	1,641.4	1,675.5	0.0	0.0	1,019.0	0.0	0.0	1,265.0
St. Louis	42.9	544.3	5.3	0.0	480.0	472.4	458.6	261.4	569.1	111.4	68.6	106.7
Dallas	0.0	917.1	133.0	475.7	1,482.9	653.6	347.1	2,001.4	2,614.1	0.0	1,864.3	467.3
Houston	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Los Angeles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.1	845.4	0.0	0.0	0.0
San Francisco	0.0	0.0	30.0	0.0	0.0	175.0	21.4	4.3	311.8	21.4	8.6	390.1
Denver	480.0	227.1	0.0	17.1	0.0	492.0	0.0	4,071.4	0.0	0.0	0.0	0.0
Average	96.2	167.7	88.4	83.6	461.3	234.5	184.3	652.5	537.2	92.1	92.1	467.0
Median	0.0	0.0	0.0	0.0	0.0	170.8	0.0	0.0	0.1	0.0	0.0	24.0

TABLE 15 (Continued)

Area	Free-Standing ^{oo}			University/ College ^{##}			Off-Premises			Shopping Center ⁺⁺⁺			Grocery/ Retail Store ⁺⁺⁺		
	1983	1984	1985	1983	1984	1985	1983	1984	1985	1983	1984	1985	1983	1984	1985
Boston	158.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	244.2	0.0	0.0	0.0	0.0	0.0	0.0
New York	0.0	4.3	774.0	0.0	132.9	278.8	0.0	0.0	331.3	0.0	257.1	12.0	0.0	0.0	0.0
Philadelphia	167.1	1,954.3	0.0	0.0	0.0	677.0	0.0	0.0	898.5	0.0	852.9	1,862.8	0.0	0.0	0.0
Pittsburgh	0.0	0.0	1,130.0	381.4	0.0	3,639.0	0.0	2,035.7	0.0	0.0	0.0	4,528.0	0.0	0.0	0.0
Washington, D.C.	115.7	34.3	0.0	0.0	162.9	0.0	0.0	0.0	0.0	0.0	210.0	0.0	0.0	0.0	0.0
Atlanta	102.9	531.4	951.2	184.3	608.6	821.4	0.0	240.0	630.6	0.0	848.6	666.3	0.0	0.0	0.0
Chicago	0.0	0.0	2,236.9	0.0	0.0	3,444.5	0.0	720.0	423.5	0.0	4,920.0	2,895.9	0.0	0.0	0.0
Cleveland	0.0	381.4	0.0	0.0	0.0	0.0	0.0	0.0	1,347.8	2,592.9	0.0	505.0	0.0	0.0	0.0
Detroit	2,010.0	0.0	0.0	0.0	0.0	187.2	2,070.0	488.6	280.9	0.0	0.0	0.0	0.0	0.0	0.0
Minneapolis/St. Paul	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
St. Louis	0.0	527.1	3,953.5	390.0	492.9	713.0	0.0	0.0	1,265.7	0.0	0.0	115.0	0.0	0.0	0.0
Dallas	3,201.4	2,134.3	2,220.7	8,160.0	2,014.3	3,276.0	2,948.6	1,628.6	1,724.8	0.0	432.9	2,262.9	0.0	0.0	0.0
Houston	0.0	0.0	0.0	0.0	0.0	0.0	128.6	2,387.1	0.0	2,687.1	0.0	0.0	0.0	0.0	0.0
Los Angeles	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	3,202.6	0.0	0.0	0.0	0.0	0.0	0.0
San Francisco	0.0	12.9	0.0	55.7	0.0	41.0	85.7	47.1	572.6	0.0	0.0	3.6	0.0	0.0	0.0
Denver	235.7	2,327.1	87.7	0.0	0.0	0.0	0.0	4.3	0.0	535.7	0.0	0.0	0.0	0.0	0.0
Average	374.5	494.2	618.7	573.2	213.2	389.1	327.1	472.0	864.0	363.5	470.1	509.3	0.0	0.0	0.0
Median	0.0	0.0	0.0	0.0	0.0	41.0	0.0	0.0	18.5	0.0	0.0	18.0	0.0	0.0	0.0

TABLE 15 (Continued)

Area	Office/Corporate Complex\$\$\$			Off-Premises Units								
	1983	1984	1985	Hospital ^{ooo}			Other ^{###}		Total ⁺⁺⁺			
				1983	1984	1985	1983	1984	1985	1983	1984	1985
Boston	42.9	0.0	547.2	17.1	77.1	418.7	30.0	0.0	104.0	68.6	38.6	268.9
New York	0.0	0.0	13.2	0.0	137.1	72.1	0.0	0.0	379.8	0.0	34.3	328.1
Philadelphia	724.3	304.3	1,553.2	0.0	227.1	1,087.4	0.0	0.0	834.0	527.1	844.3	1,343.7
Pittsburgh	17.1	0.0	773.5	270.0	0.0	2,825.0	0.0	0.0	0.0	300.0	0.0	1,307.4
Washington, D.C.	0.0	107.1	0.0	0.0	47.1	0.0	137.1	205.7	0.0	90.0	102.9	0.0
Atlanta	8.6	231.4	387.7	0.0	17.1	206.0	0.0	467.1	46.5	38.6	342.9	424.8
Chicago	698.6	775.7	1,411.3	0.0	2,768.6	528.5	0.0	0.0	830.4	445.7	0.0	1,071.6
Cleveland	0.0	1,011.4	567.6	557.1	900.0	437.4	0.0	0.0	0.0	42.9	0.0	423.3
Detroit	638.6	0.0	309.7	325.7	0.0	243.8	0.0	0.0	684.8	248.6	60.0	273.4
Minneapolis/St. Paul	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,588.6	0.0	0.0	2,545.7	1,129.7
St. Louis	0.0	0.0	481.7	0.0	1,684.3	1,415.0	0.0	167.1	373.5	372.9	488.6	425.2
Dallas	0.0	2,202.9	1,621.5	668.6	2,014.3	444.0	3,060.0	0.0	2,145.5	1,915.7	1,894.3	1,539.6
Houston	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	154.3	0.0	178.4
Los Angeles	0.0	0.0	0.0	0.0	8.6	822.8	0.0	8.6	396.8	0.0	17.1	805.4
San Francisco	0.0	0.0	324.3	0.0	0.0	0.0	0.0	0.0	18.8	21.4	4.3	496.5
Denver	570.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	188.6	2,605.7	340.8
Average	168.8	289.6	518.2	114.9	492.6	400.9	201.7	214.8	413.4	275.9	561.2	507.4
Median	0.0	0.0	25.5	0.0	0.0	162.0	0.0	0.0	25.0	0.0	0.0	307.6

TABLE 16

ATM UNITS BY AREA

Area	Lobby+			Main Office			Through-the-Wall§			Drive-up°			
	1983	1984	1985	Vestibule†	1983	1984	1985	1983	1984	1985	1983	1984	1985
Boston	3.1%	2.1%	1.3%	0.7%	0.5%	1.0%		1.4%	0.2%	0.2%	0.0%	0.2%	0.0%
New York	3.0	0.6	0.9	1.6	1.8	0.7		1.1	0.2	0.4	0.0	0.0	0.0
Philadelphia	1.7	2.4	1.9	1.4	0.0	0.5		1.1	0.8	1.6	0.0	0.0	0.0
Pittsburgh	2.1	2.0	3.8	0.0	0.0	0.0		1.4	0.9	1.9	0.0	0.0	0.0
Washington, D.C.	0.2	0.9	0.0	0.7	0.2	0.3		0.7	0.3	1.6	0.0	0.2	0.0
Atlanta	0.9	0.6	0.5	0.4	0.2	0.3		4.7	6.0	6.1	0.4	0.0	0.2
Chicago	28.1	27.1	19.6	4.5	2.6	3.3		3.4	4.5	3.3	1.1	1.3	0.9
Cleveland	2.6	2.0	1.2	1.2	0.8	0.5		0.9	0.5	2.1	0.0	0.0	0.0
Detroit	1.5	1.8	0.9	0.8	0.4	0.3		0.4	1.1	0.1	0.4	0.4	0.0
Minneapolis/St. Paul	16.7	25.0	20.0	0.0	0.0	20.0		50.0	25.0	20.0	0.0	0.0	6.7
St. Louis	3.7	8.8	4.1	0.7	2.8	1.7		6.6	2.3	1.2	0.0	0.0	0.0
Dallas	4.8	1.3	4.1	18.5	3.8	12.7		11.3	3.1	11.8	5.4	1.3	3.6
Houston	44.4	66.7	25.0	0.0	0.0	62.5		0.0	0.0	0.0	11.1	16.7	12.5
Los Angeles	1.3	0.6	0.6	0.2	0.3	0.0		0.9	0.6	2.1	0.2	0.0	0.0
San Francisco	0.7	1.3	0.5	0.1	0.2	0.4		0.6	0.9	0.6	0.0	0.2	0.0
Denver	6.1	7.1	6.3	4.9	4.4	0.0		4.9	0.0	5.3	1.2	0.9	1.1
Average	2.2%	2.5%	1.8%	1.3%	0.8%	1.0%		2.1%	2.1%	2.2%	0.3%	0.2%	0.2%
Median	1.5%	1.2%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.8%	0.0%	0.0%	0.0%

$$+Q57 \over Q72 \times 100; \quad +Q58 \over Q72 \times 100; \quad \$Q59 \over Q72 \times 100; \quad {}^{\circ}Q60 \over Q72 \times 100; \quad \#Q61 \over Q72 \times 100;$$

$$++Q62 \over Q72 \times 100; \quad ++Q63 \over Q72 \times 100; \quad \$\$Q64 \over Q72 \times 100; \quad {}^{\circ\circ}Q65 \over Q72 \times 100; \quad \#\#Q66 \over Q72 \times 100;$$

$$+++Q67 \over Q72 \times 100; \quad +++Q68 \over Q72 \times 100; \quad \$\$\$Q69 \over Q72 \times 100; \quad {}^{\circ\circ\circ}Q70 \over Q72 \times 100; \quad \#\#\#Q71 \over Q72 \times 100.$$

Note: The preceding footnotes pertain to the continuation of Table 16 on the following pages.

TABLE 16 (Continued)

Area	Lobby#			Branch Office						Drive-up\$\$\$		
	1983	1984	1985	Vestibule++			Through-the-Wall++			1983	1984	1985
Boston	11.0%	6.7%	13.7%	44.3%	49.9%	45.2%	30.6%	23.6%	14.5%	2.5%	2.5%	9.6%
New York	1.6	27.7	19.7	70.5	50.0	56.7	7.9	9.2	4.1	0.7	3.1	5.7
Philadelphia	12.7	17.5	17.6	12.1	11.8	6.6	54.9	56.5	49.9	3.1	4.6	9.2
Pittsburgh	6.2	20.9	14.2	0.0	0.0	0.0	56.5	36.0	66.0	2.0	0.0	7.5
Washington, D.C.	6.9	5.0	2.4	4.0	13.4	7.1	71.4	60.2	61.2	5.0	5.5	7.3
Atlanta	2.6	1.5	1.7	0.6	2.8	3.7	67.6	66.3	70.7	3.1	2.0	2.4
Chicago	18.0	14.2	7.5	2.2	1.3	4.7	15.7	16.1	27.1	6.7	5.2	4.7
Cleveland	5.9	15.1	9.2	11.2	8.0	11.3	69.4	49.2	58.1	3.8	14.6	7.2
Detroit	23.3	21.4	12.7	40.1	30.8	36.3	10.3	20.7	21.7	13.2	11.6	12.1
Minneapolis/St. Paul	0.0	0.0	0.0	33.3	25.0	13.3	0.0	0.0	13.3	0.0	0.0	6.7
St. Louis	6.6	15.3	11.0	14.0	12.5	11.0	61.8	34.3	30.8	4.4	4.0	1.7
Dallas	0.6	5.6	1.8	0.0	12.5	4.1	10.7	41.9	10.5	0.0	7.5	3.2
Houston	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	16.7	0.0
Los Angeles	3.0	5.0	4.0	2.1	1.4	0.8	84.2	77.7	77.3	0.9	4.4	5.7
San Francisco	2.0	9.3	11.5	0.5	0.2	0.1	89.4	80.7	53.2	2.0	2.8	1.7
Denver	2.4	2.7	1.1	18.3	4.4	4.2	18.3	41.6	20.0	0.0	0.9	0.0
Average	5.7%	10.6%	9.6%	12.5%	14.8%	18.2%	59.3%	48.9%	42.2%	3.1%	4.8%	6.4%
Median	0.5%	2.9%	2.2%	0.0%	0.0%	0.9%	57.7%	44.8%	41.1%	0.0%	1.7%	2.9%

TABLE 16 (Continued)

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TABLE 16 (Continued)

Area	Office/Corporate Complex\$\$\$			Off-Premise Units					
	1983	1984	1985	Hospital ^{ooo}			Other ^{###}		
				1983	1984	1985	1983	1984	1985
Boston	3.4%	7.6%	7.1%	1.4%	1.4%	1.6%	0.3%	0.2%	0.8%
New York	1.6	1.6	1.7	1.4	1.0	1.5	1.1	0.2	0.7
Philadelphia	2.0	1.6	2.1	0.4	0.8	1.2	1.1	0.3	0.9
Pittsburgh	3.8	0.0	1.9	2.7	0.0	0.9	3.1	0.0	0.0
Washington, D.C.	1.8	2.5	3.9	2.1	2.0	3.1	1.2	0.6	0.8
Atlanta	1.2	1.7	1.7	0.1	0.3	0.4	0.4	0.6	1.1
Chicago	6.9	5.8	5.6	0.0	1.9	1.9	5.6	4.5	4.7
Cleveland	0.9	2.3	2.9	2.0	3.8	2.6	0.0	0.0	0.0
Detroit	3.1	2.5	4.1	0.8	2.2	1.0	1.5	3.3	0.7
Minneapolis/St. Paul	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0
St. Louis	0.0	0.3	3.5	0.0	0.3	0.6	0.0	1.4	1.2
Dallas	0.4	3.1	1.8	0.6	1.3	3.6	0.6	0.0	0.9
Houston	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Los Angeles	0.6	0.8	0.4	0.2	1.7	1.0	0.6	1.7	2.7
San Francisco	2.3	0.0	0.5	0.0	0.2	0.0	1.4	0.4	0.5
Denver	1.2	0.0	2.1	0.0	0.0	1.1	0.0	0.9	4.2
Average	2.0%	2.1%	2.9%	0.8%	1.2%	1.3%	1.0%	0.8%	1.0%
Median	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

TABLE 17
ATM UNIT INSTALLATION PLANS BY AREA
PERCENTAGE OF TOTAL ATM UNITS TO BE INSTALLED

Area	Lobby ⁺			Main Office			Through-the-Wall [§]			Drive-up [°]			
	1983	1984	1985	Vestibule [†]	1983	1984	1985	1983	1984	1985	1983	1984	1985
Boston	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.7%	0.0%	2.8%	0.0%	0.0%	0.0%
New York	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Philadelphia	0.0	1.4	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0
Pittsburgh	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Washington, D.C.	4.2	4.8	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Atlanta	0.0	1.2	1.6	0.0	0.0	0.0	0.0	1.7	1.2	1.6	0.0	0.0	0.0
Chicago	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	0.0	0.0	3.7	6.3	0.0
Cleveland	0.0	1.4	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detroit	0.0	0.0	0.0	0.0	0.0	1.5	0.0	5.0	0.0	0.0	0.0	0.0	0.0
Minneapolis/St. Paul	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	33.3	50.0	0.0	33.3
St. Louis	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dallas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Houston	26.6	0.0	0.0	0.0	0.0	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0
Los Angeles	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0
San Francisco	1.5	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.8	0.0	0.0	0.0
Denver	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0	0.0	19.2	0.0
Average	0.8%	0.9%	0.6%	0.1%	0.0%	0.1%	0.1%	1.3%	0.3%	0.6%	0.1%	0.8%	0.1%
Median	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

$$\frac{+Q89}{Q104} \times 100; \frac{\pm Q90}{Q104} \times 100; \frac{\$Q91}{Q104} \times 100; \frac{^{\circ}Q92}{Q104} \times 100; \frac{\#Q93}{Q104} \times 100; \frac{++Q94}{Q104} \times 100; \frac{++Q95}{Q104} \times 100;$$

$$\frac{\$Q96}{Q104} \times 100; \frac{^{\circ}Q97}{Q104} \times 100; \frac{\#Q98}{Q104} \times 100; \frac{+++Q99}{Q104} \times 100; \frac{+++Q100}{Q104} \times 100; \frac{\$Q101}{Q104} \times 100;$$

$$\frac{^{\circ}Q102}{Q104} \times 100; \frac{\#Q103}{Q104} \times 100.$$

Note: The preceding footnotes also pertain to the continuation of Table 17 on the following pages.

TABLE 17 (Continued)

Area	Lobby#			Branch Office						Drive-up§§		
	1983	1984	1985	Vestibule++			Through-the-Wall+++			1983	1984	1985
				1983	1984	1985	1983	1984	1985			
Boston	8.2%	6.0%	5.6%	45.5%	37.3%	36.1%	5.2%	24.1%	11.1%	0.0%	0.0%	25.0%
New York	19.6	21.3	59.6	30.4	40.4	18.7	14.1	1.1	0.0	8.7	19.1	14.0
Philadelphia	38.5	13.7	0.0	2.1	12.3	8.8	29.2	26.0	31.9	6.3	30.1	33.6
Pittsburgh	39.5	73.5	0.0	28.0	0.0	0.0	23.3	7.4	86.7	2.3	5.9	0.0
Washington, D.C.	0.0	4.8	0.0	0.0	9.7	6.4	47.2	37.1	61.7	12.5	21.0	10.6
Atlanta	17.7	5.8	7.8	0.0	0.0	0.8	30.2	43.9	58.9	2.7	3.5	3.1
Chicago	7.4	0.0	0.0	0.0	6.3	0.0	18.5	12.5	17.0	3.7	0.0	16.0
Cleveland	54.0	32.9	15.2	5.3	2.9	4.5	16.9	5.7	36.4	8.8	37.1	28.8
Detroit	2.5	0.0	3.0	10.0	0.0	11.9	12.5	16.7	17.9	35.0	25.0	47.8
Minneapolis/St. Paul	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
St. Louis	68.4	0.0	0.0	1.8	11.5	0.0	8.7	38.5	25.0	12.2	3.8	0.0
Dallas	32.3	0.0	6.3	0.0	10.7	0.0	6.4	21.4	31.3	0.0	14.3	0.0
Houston	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Los Angeles	8.0	0.0	4.6	4.0	0.0	0.0	45.4	60.9	73.8	13.3	15.9	4.6
San Francisco	64.7	5.7	33.3	0.0	0.0	0.0	13.7	47.1	21.4	5.0	4.3	6.3
Denver	0.0	15.4	0.0	19.0	7.7	0.0	0.0	0.0	0.0	0.0	3.8	0.0
Average	25.5%	14.8%	19.2%	9.4%	10.9%	7.7%	24.2%	28.0%	29.5%	7.5%	12.8%	15.4%
Median	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.0%	16.7%	0.0%	0.0%	0.0%	0.0%

TABLE 17 (Continued)

Area	Free-Standing ^{oo}			University/ College ^{##}			Off-Premise Shopping Center ⁺⁺⁺			Grocery Store ⁺⁺⁺		
	1983	1984	1985	1983	1984	1985	1983	1984	1985	1983	1984	1985
Boston	0.0%	0.0%	8.3%	0.0%	4.8%	8.3%	0.0%	7.2%	0.0%	29.9%	12.0%	0.0%
New York	2.2	1.1	0.0	0.0	0.0	0.0	2.2	0.0	0.0	12.0	0.0	0.5
Philadelphia	12.5	5.5	7.1	0.0	2.7	0.9	1.0	0.0	0.9	7.3	1.4	0.0
Pittsburgh	0.0	7.4	13.3	0.0	0.0	0.0	0.0	2.9	0.0	0.0	2.9	0.0
Washington, D.C.	23.6	3.2	8.5	1.4	1.6	0.0	2.8	1.6	4.3	1.4	0.0	0.0
Atlanta	11.2	10.5	15.5	2.6	2.3	0.0	4.7	1.8	0.0	17.2	21.6	3.9
Chicago	3.7	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	50.0	24.0
Cleveland	3.5	11.4	7.6	1.8	2.9	0.0	0.9	1.4	1.5	1.8	0.0	1.5
Detroit	0.0	8.3	0.0	2.5	8.3	0.0	2.5	25.0	1.5	7.5	8.3	3.0
Minneapolis/St. Paul	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
St. Louis	1.8	11.5	0.0	0.0	0.0	0.0	0.0	3.8	6.3	0.0	7.7	62.5
Dallas	3.2	7.1	0.0	0.0	0.0	0.0	0.0	3.6	0.0	38.6	35.7	62.5
Houston	0.0	0.0	0.0	0.0	0.0	0.0	60.0	0.0	0.0	0.0	0.0	0.0
Los Angeles	0.4	0.0	6.2	2.0	4.3	1.5	8.4	0.0	3.1	2.4	7.2	0.0
San Francisco	2.2	1.4	2.4	1.4	0.0	0.8	7.2	18.6	5.6	0.0	17.1	19.8
Denver	71.5	46.2	75.0	9.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5
Average	6.1%	6.6%	7.8%	1.4%	2.0%	0.6%	4.3%	3.6%	1.7%	9.6%	10.2%	7.7%
Median	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

TABLE 17 (Continued)

Area	Office\$\$\$			Off-Premise Hospital ^{ooo}			Other###		
	1983	1984	1985	1983	1984	1985	1983	1984	1985
Boston	7.5%	7.2%	2.8%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%
New York	4.3	4.5	1.0	0.0	2.2	3.1	4.3	10.1	3.1
Philadelphia	1.0	2.7	9.7	2.1	4.1	1.8	0.0	0.0	3.5
Pittsburgh	0.0	0.0	0.0	2.3	0.0	0.0	2.3	0.0	0.0
Washington, D.C.	4.2	3.2	6.4	1.4	1.6	0.0	1.3	11.3	0.0
Atlanta	6.0	5.3	4.7	1.7	1.8	0.8	4.3	1.2	1.6
Chicago	7.4	12.5	16.0	0.0	0.0	0.0	11.2	12.5	24.0
Cleveland	3.5	1.4	1.5	3.5	2.9	1.5	0.0	0.0	0.0
Detroit	12.5	8.3	1.5	10.0	0.0	0.0	0.0	0.0	11.9
Minneapolis/St. Paul	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0
St. Louis	1.8	15.4	3.1	1.8	3.8	3.1	3.5	3.8	0.0
Dallas	6.5	3.6	0.0	6.5	3.6	0.0	6.5	0.0	0.0
Houston	0.0	0.0	0.0	0.0	0.0	0.0	6.7	0.0	0.0
Los Angeles	0.4	4.3	1.5	0.8	1.4	0.0	14.9	4.3	3.1
San Francisco	2.2	5.7	4.0	0.0	0.0	3.2	0.7	0.0	0.0
Denver	0.0	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.0
Average	3.7%	4.5%	4.2%	1.5%	1.7%	1.6%	4.5%	2.8%	2.9%
Median	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

TABLE 18

NUMBER OF MONTHLY PROPRIETARY TRANSACTIONS
PER CASH DISPENSER LOCATION BY AREA

Area	Lobby#	Vestibule++	Main Office Through- the-Wall++	Drive up§§
Boston	0.0	0	0	0
New York	0.0	0	0	0
Philadelphia	0.0	0	0	0
Pittsburgh	0.0	0	0	0
Washington, D.C.	0.0	0	0	0
Atlanta	2,532.5	0	0	0
Chicago	0.0	0	0	0
Cleveland	0.0	0	0	0
Detroit	0.0	0	0	0
Minneapolis/St. Paul	0.0	0	0	0
St. Louis	0.0	0	0	0
Dallas	0.0	0	0	0
Houston	0.0	0	0	0
Los Angeles	1,217.0	0	0	0
San Francisco	0.0	0	0	0
Denver	0.0	0	0	0
Average	1,570.5	0	0	0
Median	1,217.0	0	0	0

#Q137; ++Q138; ++Q139; §§Q140; ##Q141; +++Q142; +++Q143; §§§Q144; °°Q145;
Q73; Q74; Q75; Q76; Q77; Q78; Q79; Q80; Q81

###Q146; ++++Q147; ++++Q148; §§§§Q149; Q150; ####Q151.
Q82 Q83 Q84 Q85 Q86 Q87

Note: The preceding footnotes also pertain to the continuation of Table 18
on the following page.

TABLE 18 (Continued)

Area	Lobby##	Vestibule+++	Branch Office	
			Through- the-Wall+++	Drive up\$\$\$
Boston	0	0	0	0
New York	0	0	0	0
Philadelphia	10,231	1,671	0	0
Pittsburgh	0	0	0	0
Washington, D.C.	0	0	0	0
Atlanta	0	0	3,981	0
Chicago	0	0	0	0
Cleveland	0	0	0	0
Detroit	0	0	0	0
Minneapolis/St. Paul	0	0	0	0
St. Louis	0	0	0	0
Dallas	0	0	0	0
Houston	0	0	0	0
Los Angeles	131	0	0	0
San Francisco	0	0	0	0
Denver	0	0	0	0
Average	2,656	1,671	3,981	0
Median	197	1,671	3,981	0

TABLE 18 (Continued)

Area	Free- Standing ^{oo}	College###	Shopping Center++++	Off-Premises			
				Grocery++++	Office\$\$\$\$	Hospital ^{ooo}	Other####
Boston	0	0	0	274	0	0	0
New York	0	0	0	0	0	0	0
Philadelphia	0	4,337	0	859	0	482	354
Pittsburgh	0	0	0	0	0	0	0
Washington, D.C.	0	0	0	0	0	0	0
Atlanta	0	0	1,352	601	975	0	605
Chicago	0	0	0	265	0	0	0
Cleveland	0	2,778	0	1,043	0	0	0
Detroit	0	0	0	0	0	0	0
Minneapolis/St. Paul	0	0	0	0	0	0	0
St. Louis	0	0	0	0	0	0	0
Dallas	0	0	0	0	0	0	0
Houston	0	0	0	0	0	0	0
Los Angeles	0	0	0	742	1,000	1,200	0
San Francisco	0	3,000	0	0	0	0	0
Denver	0	0	0	0	0	0	0
Average	0	2,578	386	599	366	336	79
Median	0	2,778	0	502	333	0	78

TABLE 19

NUMBER OF MONTHLY INTERCHANGE TRANSACTIONS
PER CASH DISPENSER LOCATION BY AREA

Area	Lobby#	Vestibule++	Main Office Through- the-Wall++	Drive up §§
Boston	0	0	0	0
New York	0	0	0	0
Philadelphia	0	0	0	0
Pittsburgh	0	0	0	0
Washington, D.C.	0	0	0	0
Atlanta	121	0	0	0
Chicago	0	0	0	0
Cleveland	0	0	0	0
Detroit	0	0	0	0
Minneapolis/St. Paul	0	0	0	0
St. Louis	0	0	0	0
Dallas	0	0	0	0
Houston	0	0	0	0
Los Angeles	0	0	0	0
San Francisco	0	0	0	0
Denver	0	0	0	0
Average	61	0	0	0
Median	0	0	0	0

#Q169; ++Q170; °°Q171; §§Q172; ##Q173; +++Q174; ±±±Q175; §§§Q176; °°Q177;
 Q73 Q74 Q75 Q76 Q77 Q78 Q79 Q80 Q81

###Q178; ++++Q179; ±±±±Q180; §§§§Q181; °°°Q182; #####Q183.
 Q82 Q83 Q84 Q85 Q86 Q87

Note: The preceding footnotes also pertain to the continuation of Table 19
on the following page.

TABLE 19 (Continued)

Area	Lobby##	Branch Office			Drive up\$\$\$
		Vestibule+++	Through- the-Wall+++		
Boston	0.0	0	0		0
New York	0.0	0	0		0
Philadelphia	616.0	0	0		0
Pittsburgh	0.0	0	0		0
Washington, D.C.	0.0	0	0		0
Atlanta	0.0	0	439		0
Chicago	0.0	0	0		0
Cleveland	0.0	0	0		0
Detroit	0.0	0	0		0
Minneapolis/St. Paul	0.0	0	0		0
St. Louis	0.0	0	0		0
Dallas	0.0	0	0		0
Houston	0.0	0	0		0
Los Angeles	539.0	0	15,936		0
San Francisco	0.0	0	0		0
Denver	0.0	0	0		0
Average	558.3	0	2,321		0
Median	616.0	0	439		0

TABLE 19 (Continued)

Area	Free- Standing ^{oo}	College###	Shopping Center++++	Off-Premises			
				Grocery++++	Office\$\$\$\$	Hospital ^{ooo}	Other####
Boston	0	0	0	125	0	0	0
New York	0	0	0	0	0	0	0
Philadelphia	0	0	0	1,765	0	2,346	2,196
Pittsburgh	0	0	0	0	0	578	0
Washington, D.C.	0	0	0	0	0	0	0
Atlanta	0	0	487	514	797	0	0
Chicago	0	0	0	8,599	0	0	0
Cleveland	0	0	0	0	0	0	0
Detroit	0	0	0	0	0	0	0
Minneapolis/St. Paul	0	0	0	0	0	0	0
St. Louis	0	0	0	0	0	0	0
Dallas	0	0	0	0	0	0	0
Houston	0	0	0	0	0	0	0
Los Angeles	1,602	0	7,364	1,469	0	191	145
San Francisco	0	0	0	563	0	0	0
Denver	0	0	0	0	0	0	0
Average	1,602	0	3,295	456	278	738	424
Median	0	0	0	589	0	191	355

TABLE 20

CASH DISPENSER UNITS BY AREA

Area	Lobby#	Vestibule++	Main Office Through- the-Wall++	Drive up\$\$
Boston	0%	0%	0%	0%
New York	0	0	0	0
Philadelphia	0	0	0	0
Pittsburgh	0	0	0	0
Washington, D.C.	0	0	0	0
Atlanta	7	0	0	0
Chicago	33	0	0	0
Cleveland	0	0	0	0
Detroit	0	0	0	0
Minneapolis/St. Paul	0	0	0	0
St. Louis	0	0	0	0
Dallas	0	0	0	0
Houston	0	0	0	0
Los Angeles	3	0	0	0
San Francisco	0	0	0	0
Denver	0	0	0	0
Average	1%	0%	0%	0%
Median	0%	0%	0%	0%

$$\frac{\#Q73}{Q88} \times 100; \frac{++Q74}{Q88} \times 100; \frac{++Q75}{Q88} \times 100; \frac{\$Q76}{Q88} \times 100; \frac{\#\#Q77}{Q88} \times 100;$$

$$\frac{+++Q78}{Q88} \times 100; \frac{+++Q79}{Q88} \times 100; \frac{\$Q80}{Q88} \times 100; \frac{^{\circ\circ}Q81}{Q88} \times 100;$$

$$\frac{\#\#\#Q82}{Q88} \times 100; \frac{++++Q83}{Q88} \times 100; \frac{+++Q84}{Q88} \times 100; \frac{\$Q85}{Q88} \times 100; \frac{^{\circ\circ\circ}Q86}{Q88} \times 100;$$

$$\frac{\#\#\#\#Q87}{Q88} \times 100.$$

Note: The preceding footnotes also pertain to the continuation of Table 20 on the following page.

TABLE 20 (Continued)

Area	Lobby##	Branch Office			Drive up\$\$\$
		Vestibule+++	Through- the-Wall+++		
Boston	0%	0%	1%		1%
New York	0	0	0		0
Philadelphia	10	10	0		0
Pittsburgh	0	0	0		0
Washington, D.C.	0	0	0		0
Atlanta	0	0	20		0
Chicago	0	0	0		0
Cleveland	0	0	0		0
Detroit	0	0	0		0
Minneapolis/St. Paul	0	0	0		0
St. Louis	0	0	0		0
Dallas	0	0	0		0
Houston	0	0	0		0
Los Angeles	8	0	3		0
San Francisco	0	0	0		0
Denver	0	0	0		0
Average	1%	0%	2%		0%
Median	0%	0%	0%		0%

TABLE 20 (Continued)

Area	Off-Premises						
	Free- Standing ^{oo}	College###	Shopping Center++++	Grocery####	Office#####	Hospital ^{ooo}	Other####
Boston	0%	1%	1%	93%	1%	0%	1%
New York	0	0	0	4	96	0	0
Philadelphia	0	10	0	30	0	10	30
Pittsburgh	0	0	0	33	0	67	0
Washington, D.C.	0	0	0	0	0	0	0
Atlanta	0	0	7	17	47	0	3
Chicago	0	9	0	33	33	0	0
Cleveland	0	0	0	91	0	0	0
Detroit	0	0	0	0	0	0	0
Minneapolis/St. Paul	0	0	0	0	0	0	0
St. Louis	0	0	0	0	0	0	0
Dallas	0	0	0	0	0	0	0
Houston	0	0	0	0	0	0	0
Los Angeles	11	0	8	19	0	0	43
San Francisco	0	0	1	97	6	3	0
Denver	0	0	0	0	0	1	0
Average	1%	1%	2%	74%	11%	1%	6%
Median	0%	0%	0%	50%	0%	0%	0%

TABLE 21

CASH DISPENSER UNIT INSTALLATION PLANS BY AREA

PERCENTAGE OF TOTAL UNITS TO BE INSTALLED

Area	Lobby#	Vestibule++	Main Office Through- the-Wall++	Drive-up\$\$
Boston	0%	0%	0%	0%
New York	0	0	0	0
Philadelphia	0	0	0	0
Pittsburgh	0	0	0	0
Washington, D.C.	0	0	0	0
Atlanta	4	0	0	0
Chicago	0	0	0	0
Cleveland	0	0	0	0
Detroit	0	0	0	0
Minneapolis/St. Paul	0	0	0	0
St. Louis	0	0	0	0
Dallas	0	0	0	0
Houston	0	0	0	0
Los Angeles	0	0	0	0
San Francisco	2	0	0	0
Denver	0	0	0	0
Average	1%	0%	0%	0%
Median	0%	0%	0%	0%

$$\frac{\#Q105}{Q120} \times 100; \frac{++Q106}{Q120} \times 100; \frac{++Q107}{Q120} \times 100; \frac{\$Q108}{Q120} \times 100; \frac{\#\#Q109}{Q120} \times 100;$$

$$\frac{+++Q110}{Q120} \times 100; \frac{+++Q111}{Q120} \times 100; \frac{\$Q112}{Q120} \times 100; \frac{^{\circ}Q113}{Q120} \times 100; \frac{\#\#\#Q114}{Q120} \times 100;$$

$$\frac{++++Q115}{Q120} \times 100; \frac{++++Q116}{Q120} \times 100; \frac{\$Q117}{Q120} \times 100; \frac{^{\circ}Q118}{Q120} \times 100; \frac{\#\#\#\#Q119}{Q120} \times 100.$$

Note: The preceding footnotes also pertain to the continuation of Table 21 on the following page.

TABLE 21 (Continued)

Area	Branch Office			
	<u>Lobby###</u>	<u>Vestibule+++</u>	<u>Through- the-Wall+++</u>	<u>Drive up\$\$\$</u>
Boston	0%	0%	0%	0%
New York	0	0	0	0
Philadelphia	0	0	0	0
Pittsburgh	0	0	0	0
Washington, D.C.	0	0	0	0
Atlanta	0	0	0	0
Chicago	0	0	0	0
Cleveland	0	0	0	0
Detroit	0	0	0	0
Minneapolis/St. Paul	0	0	0	0
St. Louis	0	0	0	0
Dallas	0	0	0	0
Houston	0	0	0	0
Los Angeles	0	0	7	0
San Francisco	0	0	0	0
Denver	0	0	0	0
Average	0%	0%	1%	0%
Median	0%	0%	0%	0%

TABLE 21 (Continued)

Area	Free- Standing ^{oo}	College###	Shopping Center++++	Off-Premises		Hospital ^{ooo}	Other####
				Grocery++++	Office\$\$\$\$		
Boston	0%	7%	0%	68%	9%	16%	0%
New York	0	0	0	0	100	0	0
Philadelphia	10	20	0	10	60	0	0
Pittsburgh	0	0	0	75	0	25	0
Washington, D.C.	0	0	0	0	100	0	0
Atlanta	0	0	0	93	2	2	0
Chicago	0	0	0	0	100	0	0
Cleveland	0	11	0	0	22	12	0
Detroit	0	0	56	0	0	0	0
Minneapolis/St. Paul	0	0	96	5	0	0	0
St. Louis	0	0	0	0	0	0	0
Dallas	0	0	0	0	0	0	0
Houston	0	0	0	0	0	0	0
Los Angeles	7	7	7	57	0	7	7
San Francisco	0	2	2	95	0	0	0
Denver	0	0	0	0	0	0	0
Average	1%	3%	20%	62%	8%	4%	0%
Median	0%	0%	0%	0%	0%	0%	0%

TABLE 22
PERCENTAGE OF ON-LINE ATM UNITS BY AREA

<u>Area</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>
Boston	100.0%	100.0%	100.0%
New York	100.0	90.0	100.0
Philadelphia	83.3	100.0	67.0
Pittsburgh	100.0	100.0	100.0
Washington, D.C.	100.0	100.0	100.0
Atlanta	100.0	100.0	100.0
Chicago	71.4	57.1	75.0
Cleveland	100.0	100.0	71.4
Detroit	100.0	100.0	100.0
Minneapolis/St. Paul	100.0	100.0	100.0
St. Louis	100.0	100.0	100.0
Dallas	100.0	100.0	100.0
Houston	50.0	100.0	100.0
Los Angeles	100.0	100.0	100.0
San Francisco	85.7	87.5	100.0
Denver	75.0	100.0	100.0
Average	93.0%	94.9%	94.5%

TABLE 23
1985 SERVICE CHARGES BY AREA

<u>Area</u>	<u>No</u>	<u>Yes</u>
Boston	66.7%	33.3%
New York	85.7	14.3
Philadelphia	70.0	30.0
Pittsburgh	100.0	0.0
Washington, D.C.	50.0	50.0
Atlanta	36.4	63.6
Chicago	80.0	20.0
Cleveland	50.0	50.0
Detroit	37.5	62.5
Minneapolis/St. Paul	0.0	100.0
St. Louis	33.3	66.7
Dallas	0.0	100.0
Houston	100.0	0.0
Los Angeles	50.0	50.0
San Francisco	40.0	60.0
Denver	66.7	33.3
Average	54.0%	46.0%

TABLE 24
1985 ATM SERVICE CHARGES—STRUCTURE OF TYPES OF FEES

<u>Area</u>	<u>Transaction</u>	<u>Flat Fee</u>	<u>Both</u>	<u>Other</u>
Boston	83.3%	16.7%	0.0%	0.0%
New York	100.0	0.0	0.0	0.0
Philadelphia	71.4	28.6	0.0	0.0
Pittsburgh	100.0	0.0	0.0	0.0
Washington, D.C.	100.0	0.0	0.0	0.0
Atlanta	100.0	0.0	0.0	0.0
Chicago	87.5	12.5	0.0	0.0
Cleveland	75.0	25.0	0.0	0.0
Detroit	50.0	50.0	0.0	0.0
Minneapolis/St. Paul	*	*	*	*
St. Louis	100.0	0.0	0.0	0.0
Dallas	*	*	*	*
Houston	100.0	0.0	0.0	0.0
Los Angeles	66.7	33.3	0.0	0.0
San Francisco	100.0	0.0	0.0	0.0
Denver	100.0	0.0	0.0	0.0
Average	86.3%	13.7%	0.0%	0.0%

*No response.

TABLE 25

1985 SERVICE CHARGES COMPARISON
ATM TRANSACTIONS AND DDA PAPER ITEMS

Area	DDA Charge Higher Than ATM Charge	DDA Charge Lower Than ATM Charge	Same
Boston	100.0%	0.0%	0.0%
New York	100.0	0.0	0.0
Philadelphia	100.0	0.0	0.0
Pittsburgh	*	*	*
Washington, D.C.	100.0	*	*
Atlanta	57.1	0.0	42.9
Chicago	66.7	0.0	33.3
Cleveland	75.0	0.0	25.0
Detroit	50.0	16.7	33.3
Minneapolis/St. Paul	50.0	0.0	50.0
St. Louis	100.0	0.0	0.0
Dallas	33.3	0.0	67.3
Houston	*	*	*
Los Angeles	60.0	*	40.0
San Francisco	57.1	0.0	42.9
Denver	100.0	0.0	0.0
Average	68.6%	2.0%	29.4%

*No response.

TABLE 26a
ACTIVE PROPRIETARY ATM ACCESS CARDS

Area	1984	1985
Boston	58.0%	61.5%
New York	40.4	34.0
Philadelphia	42.7	*
Pittsburgh	0.0	*
Washington, D.C.	42.2	*
Atlanta	51.2	30.8
Chicago	45.0	56.4
Cleveland	33.7	78.6
Detroit	41.0	62.6
Minneapolis/St. Paul	0.0	47.7
St. Louis	48.6	46.4
Dallas	48.5	*
Houston	0.0	66.7
Los Angeles	41.8	39.2
San Francisco	38.6	42.0
Denver	30.1	*
Average	41.7%	51.5%

*No response.

TABLE 26b
ACTIVE NATIONAL ATM ACCESS CARDS

<u>Area</u>	<u>1985</u>
Boston	56.5%
New York	38.5
Philadelphia	42.0
Pittsburgh	*
Washington, D.C.	*
Atlanta	47.3
Chicago	51.8
Cleveland	71.6
Detroit	72.5
Minneapolis/St. Paul	*
St. Louis	48.0
Dallas	*
Houston	*
Los Angeles	51.2
San Francisco	51.0
Denver	94.7
Average	57.3%

*No response.

4 POS FINDINGS

POS began in 1966 with a single pilot program initiated by the Bank of Delaware. During the 1970s, numerous pilots were tried but with few successes. Instead, banks turned to ATMs. In 1983, the financial services industry expressed renewed interest in POS. New POS test sites emerged, primarily in grocery stores and gasoline service stations. Network executives and retailers began considering the mutual costs and benefits of POS programs.

As reported by the Bank Network News in its 1986 EFT Network Data Book, regional shared networks perform more than 800,000 POS transactions per month on 5,500 terminals. Of the top 100 networks, 27 now have POS terminals on-line. Interest is continuing as an increasing number of merchants and bankers alike are exploring POS opportunities.

The following data represent only a sampling of what is occurring in the POS arena. Of those responding to the EFT survey, approximately 20 percent completed the section on POS activity. Of these, 84 percent had assets in excess of \$1 billion. Most of the banks reporting POS data are in the Northeast and Southwest United States. Tables 27-42 present POS-related data.

Major POS findings:

- o The credit card account is clearly the primary account accessed at the point of sale, followed by the checking account (Tables 27 and 28). This point is especially true for interchange transactions, where credit cards account for 83.2 percent of the total.
- o The average dollar value for a proprietary POS checking transaction was \$21.34, while its interchange counterpart was slightly higher at \$30.60 (Tables 29 and 30). The average dollar values for savings transactions (consumers paying for purchases by accessing savings accounts) were nearly identical at \$23.96 and \$23.75 for proprietary and interchange transactions, respectively.
- o Credit card average dollar values for both proprietary and interchange transactions ranged from \$40 to \$47, similar to the average credit card ticket size as quoted by the industry (Tables 29 and 30).
- o An average POS terminal processes approximately 55 transactions to a checking and savings account per month and 329 to a credit card account when both interchange and proprietary transactions are considered (Tables 31 and 32).
- o Locations classified as "retail" and "other" in the survey are using terminals without the PIN requirement. Of the proprietary transactions at these locations, 68 percent are completed on stand-alone units and 32 percent are completed on electronic cash registers (ECR). When interchange transactions are completed, the ECR figure jumps to 91 percent and the stand-alone figure falls to 9 percent (Tables 33 and 34).

- o All supermarket locations are requiring PINs; 100 percent of both the proprietary and interchange transactions are completed on electronic cash registers (Tables 33 and 34).
- o Of the banks in the survey with convenience store locations, all required PINs; 100 percent of the transactions were proprietary and completed on stand-alone units (Table 33).
- o Of the proprietary transactions completed at gas station locations (with and without PINs), 100 percent were on stand-alone units. All interchange transactions performed at gas station locations required PINs and were done on stand-alone units (Tables 33 and 34).
- o Nearly three-quarters of the banks responding to the POS questions are not charging customers POS service fees (Table 36). Of those that are, 71 percent of the fees are being charged on a per transaction basis (Table 37). In 69 percent of the cases, the fee is equal to that charged for an ATM transaction (Table 38).
- o If the bank owns the terminal, 12 percent of the merchants are currently paying some form of a fee to the owner. If the merchant owns the terminal, however, he currently is not paying a fee to the bank (Table 39). Of the fees being paid, 66 percent are on a per transaction basis (Table 40).
- o If the bank owns the terminal, 53 percent of the merchants are receiving some form of a fee. If the merchant owns the terminal, however, 66 percent of the merchants are receiving some form of a fee from the bank (Table 41). Of the fees being received, 57 percent are on a per transaction basis (Table 42).

TABLE 27
PERCENTAGE OF PROPRIETARY POS TRANSACTIONS BY TYPE OF ACCOUNT

<u>Checking</u> ⁺	<u>Saving</u> [°]	<u>Credit Card</u> [#]	<u>Other</u> ^¼
21.9%	.2%	77.8%	0.0%

⁺Q226/Q230*100; [°]Q227/Q230*100; [#]Q228/Q230*100; ^¼Q229/Q230*100.

TABLE 28
PERCENTAGE OF INTERCHANGE POS TRANSACTIONS BY TYPE OF ACCOUNT

<u>Checking</u> ⁺	<u>Saving</u> [°]	<u>Credit Card</u> [#]	<u>Other</u> ^¼
5.6%	1.0%	83.17%	11.2%

⁺Q235/Q239*100; [°]Q236/Q239*100; [#]Q237/Q239*100; ^¼Q238/Q239*100.

TABLE 29
AVERAGE DOLLAR VALUE OF PROPRIETARY POS TRANSACTIONS

<u>Checking</u> ⁺	<u>Saving</u> [°]	<u>Credit Card</u> [#]	<u>Other</u> ^¼
\$21.34	\$23.96	\$47.97	\$0

⁺Q231/226; [°]Q232/Q227; [#]Q233/Q228; ^¼Q234/Q229.

TABLE 30
AVERAGE DOLLAR VALUE OF INTERCHANGE POS TRANSACTIONS

<u>Checking</u> ⁺	<u>Saving</u> [°]	<u>Credit Card</u> [#]	<u>Other</u> ^¼
\$30.60	\$23.75	\$40.05	\$12.49

⁺Q240/Q235; [°]Q241/Q236; [#]Q242/Q237; ^¼Q243/Q238.

TABLE 31
AVERAGE MONTHLY PROPRIETARY TRANSACTIONS PER POS TERMINAL

<u>Checking</u> ⁺	<u>Saving</u> [°]	<u>Credit Card</u> [#]	<u>Other</u> ^¼
36.4	3.2	128	0

⁺Q226/A; [°]Q227/A; [#]Q228/A; ^¼Q229/A.
A = Q250+Q257+Q264+Q271+Q278+Q285

TABLE 32
AVERAGE MONTHLY INTERCHANGE TRANSACTIONS PER POS TERMINAL

<u>Checking</u> ⁺	<u>Saving</u> [°]	<u>Credit Card</u> [#]	<u>Other</u> ^¼
13.6	2.0	201.6	6.8

⁺Q235/A; [°]Q236/A; [#]Q237/A; ^¼Q238/A.
A = Q250+Q257+Q264+Q271+Q278+Q285

TABLE 33
PERCENTAGE OF MONTHLY PROPRIETARY TRANSACTIONS BY TERMINAL LOCATION

With PINS Required

	<u>Gas</u>	<u>Gas/Conven.</u>	<u>Convenience</u>	<u>Supermarket</u>	<u>Retail</u>	<u>Other</u>
Stand-alone	100.0%	23.0%	100.0%	0	0	0
Script	0	77.0%	0	0	0	0
ECR	0	0	0	100.0%	0	0

Without PINS Required

	<u>Gas</u>	<u>Gas/Conven.</u>	<u>Convenience</u>	<u>Supermarket</u>	<u>Retail</u>	<u>Other</u>
Stand-Alone	100.0%	100.0%	0	0	68.0%	100.0%
Script	0	0	0	0	0	0
ECR	0	0	0	0	32.0%	0

TABLE 34
PERCENTAGE OF MONTHLY INTERCHANGE TRANSACTIONS BY TERMINAL LOCATION

With PINS Required

	<u>Gas</u>	<u>Gas/Conven.</u>	<u>Convenience</u>	<u>Supermarket</u>	<u>Retail</u>	<u>Other</u>
Stand-alone	100.0%	0	0%	0%	0	0
Script	0	100%	0	0	0	0
ECR	0	0	0	100.0	0	0

Without PINS Required

	<u>Gas</u>	<u>Gas/Conven.</u>	<u>Convenience</u>	<u>Supermarket</u>	<u>Retail</u>	<u>Other</u>
Stand-alone	0	100.0%	0	0	9%	100.0%
Script	0	0	0	0	0	0
ECR	0	0	0	0	91	0

TABLE 35
PERCENTAGE OF POS TERMINALS PER STORE LOCATION

	<u>Gas</u> ¹	<u>Gas/Conven.</u> ²	<u>Convenience</u> ³	<u>Supermarket</u> ⁴	<u>Retail</u> ⁵	<u>Other</u> ⁶
Stand-Alone	1.9%	5.0%	.3%	0%	90.8%	1.9%
Script	0	45.5	0	54.5	0	0
ECR	0	0	0	2.5	91.3	6.2

¹ $\frac{Q244+Q251}{Q250+Q257} * 100$; ² $\frac{Q245+Q252}{Q251+Q258} * 100$; ³ $\frac{Q246+Q253}{Q252+Q259} * 100$;

⁴ $\frac{Q247+Q254}{Q253+Q260} * 100$; ⁵ $\frac{Q247+Q255}{Q254+Q261} * 100$; ⁶ $\frac{Q248+Q256}{Q255+Q262} * 100$

TABLE 36
CARDHOLDER POS SERVICE CHARGES

<u>No</u>	<u>Yes</u>
72.0%	28%

TABLE 37
CARDHOLDER POS SERVICE CHARGES — TYPE OF FEES

<u>Per Transaction</u>	<u>Flat Fee</u>	<u>Both</u>	<u>Other</u>
71.0%	0.0	0.0	29.0%

TABLE 38
CARDHOLDER POS SERVICE CHARGES — COMPARED TO ATM SERVICE CHARGES

No	Yes
31.0%	69.0%

TABLE 39
MERCHANT POS SERVICE CHARGE PAID — BY TERMINAL OWNERSHIP

Bank's Terminal		Merchant's Terminal	
No	Yes	No	Yes
88%	12%	100%	0%

TABLE 40
MERCHANT POS SERVICE CHARGE PAID — TYPE OF FEES

Per Transaction	Flat Fee	Both	Other
66%	0.0	0.0	33.0%

TABLE 41
MERCHANT POS SERVICE CHARGE RECEIVED — BY TERMINAL OWNERSHIP

Bank's Terminal		Merchant's Terminal	
No	Yes	No	Yes
47.0%	53.0%	33.0%	66.0%

TABLE 42
MERCHANT POS SERVICE CHARGE RECEIVED — TYPE OF FEES

Per Transaction	Flat Fee	Both	Other
57.0%	0.0	29.0%	14%

Appendices

Appendix A

1985 Survey Questionnaire

1985 Survey of Electronic Funds Transfer Transactions

Bank Administration Institute

AN OPERATIONS & TECHNOLOGY GROUP PROJECT

INSTRUCTIONS

- Please report data captured during all business days in September, 1985.
- The Comments, Section XVII, should be completed at the end of the survey period.
- Since you may be unable to answer all questions, please respond with "N.A." if the question does not apply to your bank, or with a "zero" where appropriate.
- Please read all definitions before completing the survey.
- Mail the completed survey booklet to:

1985 EFT Survey
Bank Administration Institute
60 Gould Center
Rolling Meadows, Illinois 60008

- If you have any questions, please call Charlene M. Brewis at (312) 228-6200.

BANK ADMINISTRATION INSTITUTE

Survey of Electronic Funds Transfer Transactions

Date _____

Financial Institution _____

Street Address _____

City _____ State _____ Zip _____

Name _____ Title _____
(of person to be contacted about survey data)

Address _____ Phone _____
(if different from above)

Name _____ Title _____
(of person to whom completed survey is to be returned, if different from above)

Please report all actual counts. Do not round off.

ACH TRANSACTIONS—any electronic funds transfer transactions processed through a local or regional automated clearinghouse, including any items you have processed for your own customers.

RETURNED ACH TRANSACTIONS:

Sent—any ACH transaction that you returned to the originator because you were unable to post to an account or for which no prenotification was on file.

Received—any ACH transaction that you originated, but which was returned to you by the ACH or the intended receiver.

ACH DEBIT TRANSACTIONS:

Insurance Premium, Home Mortgage—any ACH transaction sent or received by you for the payment of a consumer obligation.

Telephone Bill Payment—any ACH transaction sent or received by you as a result of a telephone bill payment program at a financial institution.

Corporate Payment—any ACH transaction sent or received by you that was originated by a corporation for the account of a corporation.

I. ACH TRANSACTIONS

QUESTION	TOTAL MONTH	
	Sent	Received
1./2. Debits	1.	2.
3./4. Credits	3.	4.
5./6. Total ACH Transactions (Add Columns)	5.	6.

II. RETURNED ACH TRANSACTIONS

QUESTION	TOTAL MONTH	
	Sent	Received
7./8. Debits returned	7.	8.
9./10. Credits returned	9.	10.
11./12. Total returned Transactions (Add Columns)	11.	12.

III. ACH DEBIT TRANSACTIONS

QUESTION	TOTAL MONTH	
	Sent	Received
13./14. Insurance premium	13.	14.
15./16. Home mortgage	15.	16.
17./18. Telephone bill payment	17.	18.
19./20. Corporate payment—replacement for depository transfer	19.	20.
21./22. Other payments	21.	22.
23./24. Total ACH debit Transactions (Add Columns)	23.	24.

Are you operating in a proprietary ATM environment?
(Circle One)

1. No 2. Yes

If *yes* do you plan to participate in a shared ATM environment in the next year? (Circle One)

1. No 2. Yes

Please complete Table IV below and skip to Table VI.

If *no* (meaning you are in a shared network), complete Tables IV and V below and continue to Table VI.

IV. ATM TRANSACTIONS—PROPRIETARY

Please report all actual counts. Do *not* round off.

ATM TRANSACTIONS—PROPRIETARY—any transactions initiated at *your* bank's automated teller machine by *your* customers.

QUESTION	TOTAL MONTH
25. Total number of cash withdrawals from checking.	25.
26. Total number of cash withdrawals from savings.	26.
27. Total number of cash withdrawals from credit card.	27.
28. Total number of balance inquiries.	28.
29. Total number of transfers between checking, savings, and credit card accounts.	29.
30. Total number of checking deposits received.	30.
31. Total number of savings deposits received.	31.
32. Total number of bill payments.	32.
33. Total number of <i>other</i> ATM transactions.	33.
34. Total ATM transactions (Add No. 25–No. 33)	34.
35. Total dollar value of items in No. 25.	35. \$
36. Total dollar value of items in No. 26.	36. \$
37. Total dollar value of items in No. 27.	37. \$
38. Total dollar value of items in No. 30.	38. \$
39. Total dollar value of items in No. 31.	39. \$
40. Total dollar value of items in No. 32.	40. \$

V. SHARED ATM TRANSACTIONS—INTERCHANGE

Please report all actual counts. Do *not* round off.

SHARED ATM TRANSACTIONS INTERCHANGE—any transactions initiated at *your* bank's automated teller machine by *another* financial institution's customer.

QUESTION	TOTAL MONTH
41. Total number of cash withdrawals from checking.	41.
42. Total number of cash withdrawals from savings.	42.
43. Total number of cash withdrawals from credit card.	43.
44. Total number of balance inquiries.	44.
45. Total number of transfers between checking, savings, and credit card accounts.	45.
46. Total number of checking deposits received.	46.
47. Total number of savings deposits received.	47.
48. Total number of bill payments.	48.
49. Total number of <i>other</i> ATM transactions.	49.
50. Total ATM transactions (Add No. 41–No. 49)	50.
51. Total dollar value of items in No. 41.	51. \$
52. Total dollar value of items in No. 42.	52. \$
53. Total dollar value of items in No. 43.	53. \$
54. Total dollar value of items in No. 46.	54. \$
55. Total dollar value of items in No. 47.	55. \$
56. Total dollar value of items in No. 48.	56. \$

VI. ATM LOCATIONS

Please complete the following questions:		MAIN OFFICE				BRANCH OR FACILITY OFFICES				OFF-PREMISE UNITS							TOTAL (Add rows across)
		Lobby	Vestibule	Through the Wall	Drive-up	Lobby	Vestibule	Through the Wall	Drive-up	Free Standing	University/ College	Shopping Center	Grocery/ Retail Store	Office/ Corporate Complex	Hospital	Other	
How many automated teller machines/cash dispensers do you presently have in service?	Automated Teller Machine	57.	58.	59.	60.	61.	62.	63.	64.	65.	66.	67.	68.	69.	70.	71.	72.
	Cash Dispenser	73.	74.	75.	76.	77.	78.	79.	80.	81.	82.	83.	84.	85.	86.	87.	88.
How many automated teller machines/cash dispensers do you plan to install in the next 12 months?	Automated Teller Machine	89.	90.	91.	92.	93.	94.	95.	96.	97.	98.	99.	100.	101.	102.	103.	104.
	Cash Dispense.	105.	106.	107.	108.	109.	110.	111.	112.	113.	114.	115.	116.	117.	118.	119.	120.
What was the total volume of <i>proprietary</i> ATM transactions for all machines installed at each location during the test period, excluding balance inquiries?	Automated Teller Machine	121.	122.	123.	124.	125.	126.	127.	128.	129.	130.	131.	132.	133.	134.	135.	136.
	Cash Dispenser	137.	138.	139.	140.	141.	142.	143.	144.	145.	146.	147.	148.	149.	150.	151.	152.
What was the total volume of <i>inter-change</i> ATM transactions for all machines at each location during the test period, excluding balance inquiries?	Automated Teller Machine	153.	154.	155.	156.	157.	158.	159.	160.	161.	162.	163.	164.	165.	166.	167.	168.
	Cash Dispenser	169.	170.	171.	172.	173.	174.	175.	176.	177.	178.	179.	180.	181.	182.	183.	184.

NUMBER OF CARDS OUTSTANDING—total number of cards issued since ATM program introduction with validated access capability.

HOUSEHOLD—a social unit comprised of those living together in the same dwelling.

NUMBER OF HOUSEHOLDS—total number of households that have at least one ATM access card outstanding.

NUMBER OF ACTIVE CARDS—total number of ATM access cards with a usage rate of at least once per month.

LOCAL NETWORK—a network of local financial institutions sharing intrastate ATMS.

REGIONAL NETWORK—a network of financial institutions with reciprocal ATM sharing agreements serving natural market areas across state lines.

NATIONAL NETWORK—a network of financial institutions sharing interstate ATMs across the country.

VII. ATM ACCESS CARDS

Type of ATM Access Card	Number of Cards Outstanding	Number of Households	Number of Active Cards
Proprietary ATM cards only	185.	186.	187.
Shared ATM cards with local or regional network access only	188.	189.	190.
Shared ATM cards with local or regional and national network access	191.	192.	193.
VISA debit card	194.	195.	196.
VISA credit card	197.	198.	199.
MasterCard debit card	200.	201.	202.
MasterCard credit card	203.	204.	205.
Other (please specify) _____ _____	206.	207.	208.
TOTALS (Add columns)	209.	210.	211.

VIII. ATM SERVICE CHARGES

212. Does your bank levy a service charge on customers for using the ATM? (Circle one)

1. No 2. Yes

213. If answer is no to No. 212, does your bank plan to levy a service charge in the next year on customers for using the ATM? (Circle one)

1. No 2. Yes

214. If answer is yes to No. 212, how is your service charge on ATM transactions structured? (circle one)

1. Per transaction charge
2. Flat fee
3. Flat fee and per transaction charge
4. Other (please specify) _____

215. is your service charge for ATM transactions _____ the service charge for DDA paper items? (Circle one)

1. Higher than
2. Lower than
3. The same as

IX. ON-LINE/OFF-LINE

216. Are your ATMs/cash dispensers currently (Circle one)

1. On-line?
2. Off-line?

If your bank is participating in a shared ATM environment,
please complete Table X below and continue to Table XI.

If your bank is *not* participating in a shared ATM environment,
please skip to Table XI.

X. ATM INTERCHANGE FEES EARNED DURING THE SURVEY PERIOD

QUESTION	TOTAL MONTH
217. Total estimated ATM interchange fees earned from cash withdrawals from checking.	217. \$
218. Total estimated ATM interchange fees earned from cash withdrawals from savings.	218. \$
219. Total estimated ATM interchange fees earned from cash withdrawals from credit card.	219. \$
220. Total estimated ATM interchange fees earned from balance inquiries.	220. \$
221. Total estimated ATM interchange fees earned from transfers of funds between accounts.	221. \$
222. Total estimated ATM interchange fees earned from deposits into checking.	222. \$
223. Total estimated ATM interchange fees earned from deposits into savings.	223. \$
224. Total estimated ATM interchange fees earned from <i>other</i> ATM transactions.	224. \$
225. Total estimated ATM interchange fees earned from ALL ATM transactions. (Add column)	225. \$

Are you currently operating in a proprietary POS environment? (Circle One)

1. No 2. Yes

If yes complete Table XI only and skip to Table XIII.

If no (meaning you are participating in an interchange POS environment), complete Tables XI and XII below and continue to table XIII.

If you are not participating in any kind of POS environment at this time, please skip to Table XVII.

XI. POS TRANSACTIONS—PROPRIETARY

Please report all actual counts. Do *not* round off.

POS TRANSACTIONS—PROPRIETARY—any transactions initiated by your customers at your bank's merchant, where the transaction is electronically authorized and captured for processing. The electronic device does not dispense cash to the customer.

QUESTION	TOTAL MONTH
226. Total number of debits to checking.	226.
227. Total number of debits to savings.	227.
228. Total number of debits to credit card.	228.
229. Total number of debits to other account.	229.
230. Total POS transactions. (Add No. 226–No. 229)	230.
231. Total dollar value of items in No. 226.	231. \$
232. Total dollar value of items in No. 227.	232. \$
233. Total dollar value of items in No. 228.	233. \$
234. Total dollar value of items in No. 229.	234. \$

XII. POS TRANSACTIONS—INTERCHANGE

Please report all actual counts. Do *not* round off.

POS TRANSACTIONS—INTERCHANGE—any transactions initiated by another financial institution's customer at your bank's merchant, where the transaction is electronically authorized and captured for processing. The electronic device does not dispense cash to the customer.

QUESTION	TOTAL MONTH
235. Total number of debits to checking.	235.
236. Total number of debits to savings.	236.
237. Total number of debits to credit card.	237.
238. Total number of debits to other account.	238.
239. Total POS transactions. (Add No. 235–No. 238)	239.
240. Total dollar value of items in No. 235.	240. \$
241. Total dollar value of items in No. 236.	241. \$
242. Total dollar value of items in No. 237.	242. \$
243. Total dollar value of items in No. 238.	243. \$

If your bank is participating in a shared ATM environment,
please complete Table X below and continue to Table XI.

If your bank is *not* participating in a shared ATM environment,
please skip to Table XI.

X. ATM INTERCHANGE FEES EARNED DURING THE SURVEY PERIOD

QUESTION	TOTAL MONTH
217. Total estimated ATM interchange fees earned from cash withdrawals from checking.	217. \$
218. Total estimated ATM interchange fees earned from cash withdrawals from savings.	218. \$
219. Total estimated ATM interchange fees earned from cash withdrawals from credit card.	219. \$
220. Total estimated ATM interchange fees earned from balance inquiries.	220. \$
221. Total estimated ATM interchange fees earned from transfers of funds between accounts.	221. \$
222. Total estimated ATM interchange fees earned from deposits into checking.	222. \$
223. Total estimated ATM interchange fees earned from deposits into savings.	223. \$
224. Total estimated ATM interchange fees earned from <i>other</i> ATM transactions.	224. \$
225. Total estimated ATM interchange fees earned from ALL ATM transactions. (Add column)	225. \$

Are you currently operating in a proprietary POS environment? (Circle One)

1. No

2. Yes

If yes complete Table XI only and skip to Table XIII.

If no (meaning you are participating in an interchange POS environment), complete Tables XI and XII below and continue to table XIII.

If you are not participating in any kind of POS environment at this time, please skip to Table XVII.

XI. POS TRANSACTIONS—PROPRIETARY

Please report all actual counts. Do not round off.

POS TRANSACTIONS—PROPRIETARY—any transactions initiated by your customers at your bank's merchant, where the transaction is electronically authorized and captured for processing. The electronic device does not dispense cash to the customer.

QUESTION	TOTAL MONTH
226. Total number of debits to checking	226.
227. Total number of debits to savings	227.
228. Total number of debits to credit card	228.
229. Total number of debits to other account	229.
230. Total POS transactions. (Add No. 226–No. 229)	230.
231. Total dollar value of items in No. 226	231. \$
232. Total dollar value of items in No. 227	232. \$
233. Total dollar value of items in No. 228	233. \$
234. Total dollar value of items in No. 229	234. \$

XII. POS TRANSACTIONS—INTERCHANGE

Please report all actual counts. Do not round off.

POS TRANSACTIONS—INTERCHANGE—any transactions initiated by another financial institution's customer at your bank's merchant, where the transaction is electronically authorized and captured for processing. The electronic device does not dispense cash to the customer.

QUESTION	TOTAL MONTH
235. Total number of debits to checking	235.
236. Total number of debits to savings	236.
237. Total number of debits to credit card	237.
238. Total number of debits to other account	238.
239. Total POS transactions. (Add No. 235–No. 238)	239.
240. Total dollar value of items in No. 235	240. \$
241. Total dollar value of items in No. 236	241. \$
242. Total dollar value of items in No. 237	242. \$
243. Total dollar value of items in No. 238	243. \$

If a PIN is required to use the terminal, please respond to the question in the row marked *yes*.

If a PIN is *not* required to use the terminal, please respond to the question in the row marked *no*.

STAND-ALONE UNIT—an electronic device that will authorize and capture a monetary transaction.

SCRIPT WRITER—an electronic device that will authorize and capture a monetary transaction, activated by the customer and given script to be presented to the merchant.

ELECTRONIC CASH REGISTER—an electronic device that will capture a monetary transaction within the cash register or a device linked to the cash register.

XIII. POS TERMINALS—LOCATIONS

		Are PINs Required?	Gas Station Only	Gas/Conven- ience Store	Convenience Store	Supermarket	Retailer	Other	TOTAL (Add row across)
How many terminals do you presently have in service?	Stand-Alone Unit	Yes	244	245	246	247	248	249	250
		No	251	252	253	254	255	256	257
	Script Writer	Yes	258	259	260	261	262	263	264
		No	265	266	267	268	269	270	271
	Electronic Cash Register	Yes	272	273	274	275	276	277	278
		No	279	280	281	282	283	284	285
How many terminals do you plan to install in the next 12 months?	Stand-Alone Unit	Yes	286	287	288	289	290	291	292
		No	293	294	295	296	297	298	299
	Script Writer	Yes	300	301	302	303	304	305	306
		No	307	308	309	310	311	312	313
	Electronic Cash Register	Yes	314	315	316	317	318	319	320
		No	321	322	323	324	325	326	327
What was the total volume of <i>proprietary</i> POS transactions for all terminals installed at each location during the survey period?	Stand-Alone Unit	Yes	328	329	330	331	332	333	334
		No	335	336	337	338	339	340	341
	Script Writer	Yes	342	343	344	345	346	347	348
		No	349	350	351	352	353	354	355
	Electronic Cash Register	Yes	356	357	358	359	360	361	362
		No	363	364	365	366	367	368	369
What was the total volume of <i>interchange</i> POS transactions for all terminals installed at each location during the survey period?	Stand-Alone Unit	Yes	370	371	372	373	374	375	376
		No	377	378	379	380	381	382	383
	Script Writer	Yes	384	385	386	387	388	389	390
		No	391	392	393	394	395	396	397
	Electronic Cash Register	Yes	398	399	400	401	402	403	404
		No	405	406	407	408	409	410	411

NUMBER OF CARDS OUTSTANDING—total number of cards issued since ATM/POS program introduction with validated access capability.

HOUSEHOLD—a social unit comprised of those living together in the same dwelling.

NUMBER OF HOUSEHOLDS—total number of households that have at least one ATM/POS access card outstanding.

NUMBER OF ACTIVE CARDS—total number of ATM/POS access cards with a usage rate of at least once per month.

XIV. POS ACCESS CARDS

Type of POS Access Card	Number of Cards Outstanding	Number of Households	Number of Active Cards
Proprietary ATM/POS cards only	412.	413.	414.
Shared ATM/POS cards with local or regional network access only	415.	416.	417.
Shared ATM/POS cards with local or regional and national network access	418.	419.	420.
VISA debit card	421.	422.	423.
VISA credit card	424.	425.	426.
MasterCard debit card	427.	428.	429.
MasterCard credit card	430.	431.	432.
Other (please specify)			
	433.	434.	435.
TOTALS (Add columns)	436.	437.	438.

XV. POS SERVICE CHARGES TO YOUR CARDHOLDER

439. Does your bank levy a service charge on customers for using a POS terminal? (Circle one)
1. No 2. Yes
440. If answer is no to No. 439, does your bank plan to levy a service charge, in the next year, on customers for using ATM/POS cards? (Circle one)
1. No 2. Yes
441. If answer is yes to No. 439, how is your service charge on POS transactions structured? (Circle one)
1. Per transaction charge
2. Flat fee
3. Flat fee and per transaction charge
4. Other (please specify) _____
442. Is your service charge for POS transactions the same charge for ATM transactions? (Circle one)
1. No 2. Yes

XVI. POS SERVICE CHARGES AND YOUR MERCHANT

443. Do you *pay* a service charge to the merchant if your customer uses *your* POS terminal at their location? (Circle one)
1. No 2. Yes
444. Do you *pay* a service charge to the merchant if your customer uses *the merchant's* POS terminal at their location? (Circle one)
1. No 2. Yes
445. How is the service charge paid on these POS transactions structured? (Circle one)
1. Per transaction
2. Flat fee
3. Flat fee and per transaction charge
4. Other (please specify) _____
446. Do you *receive* a service charge from the merchant if your customer uses *your* POS terminal at their location? (Circle one)
1. No 2. Yes
447. Do you *receive* a service charge from the merchant if your customer uses *the merchant's* POS terminal at their location? (Circle one)
1. No 2. Yes
448. How is the service charge received on these POS transactions structured? (Circle one)
1. Per transaction
2. Flat fee
3. Flat fee and per transaction charge
4. Other (please specify) _____

XVII. COMMENTS

NOTE: The results of the past Electronic Funds Transfer Transactions Survey contained appendices devoted to commentary from the nation's EFT professionals. Please provide your comments so that we can continue this valuable forum. How have conditions changed from last year? What threats and/or opportunities will these items present in the future? How should they be handled? Attach a separate sheet if you need more space.

ACH settlement

ACH prenotifications

ACH return items

ATM settlement

ATM vandalism

ATM availability

ATM fraud/losses

ATM security

Regulation E

POS settlement

POS return items

POS fraud/losses

POS security

Additional comments

Appendix B

Geographic Survey Areas



Figure B-1
EFT Geographic Areas

TABLE B-1
SURVEY RESPONDENTS BY GEOGRAPHIC AREA

<u>Area</u>	<u>All Reporting Banks+</u>		
	<u>1983</u>	<u>1984</u>	<u>1985</u>
Boston	5	4	10
New York	13	13	9
Philadelphia	12	11	10
Pittsburgh	5	2	2
Washington, D.C.	6	8	4
Atlanta	13	15	12
Chicago	8	8	10
Cleveland	7	7	7
Detroit	5	5	8
Minneapolis/St. Paul	1	1	2
St. Louis	6	10	6
Dallas	4	4	4
Houston	2	1	1
Los Angeles	8	7	9
San Francisco	8	8	10
Denver	4	4	3
Total banks	107	110	107

Appendix C

Comments Submitted by Bankers

COMMENTS SUBMITTED BY BANKERS

The following comments were submitted by bankers who participated in the Institute's 1985 EFT survey. The purpose of this section is to inform bankers about overall problems in the ACH, ATM, and POS payment systems. References to specific organizations, vendors, or pieces of equipment are omitted; however, comments concerning working relations with Federal Reserve Banks and other financial institutions that are pertinent to the overall functioning of the EFT system have been included to promote the cooperative efforts for improvement by all participants.

ACH: Settlement

"We have devised our own means of settling automatically with the Fed. However, we have many correspondents that we settle for and it takes two days to receive the Fed paperwork."

"While we use both the one- and two-day settlement methods, we feel same-day settlement requires further study to ensure proper control."

"Many institutions do not properly utilize the ACH settlement procedures to determine if an ACH file is received, i.e., an institution is debited/credited on their Federal Reserve ACH activity sheet and the ACH file was not received."

"Correspondent settlement should be automated."

ACH: Prenotifications

"There is no means of verifying that prenotes reach their destination. Many bank systems do not recognize zero dollar transactions."

"Most banks do not process prenotifications at all. If they do, the operation usually exceeds the NACHA guidelines for timeliness in handling them. Enforcement of these rules/regulations should be addressed and followed."

"We have seen a dramatic increase in prenotifications as many financial institutions begin origination of credit and debit transactions for themselves and for client companies. Major utilities have begun debit origination, and direct deposit of payroll is becoming the preferred method of payment."

"A study of the prenotification process is recommended. The present myriad of service requirements, lack of enforceability, and differing interpretations of the legal significance has lead to confusion for both the originator and the receiver."

"The recent change in NACHA regulations allowing CCD transactions without prenotification has improved operations and customer relationships. It has also enhanced the selling of the automated DTC product to the corporate customer."

"Pre-notification should be optional. Major banks/data processors are incurring increased costs and therefore impeding the growth of ACH."

"ACH notifications of change are not acted upon by many institutions. It is frustrating to incur the expense of sending these notifications and have to continue correcting incorrect entries. On the positive side, we see more insurance companies converting preauthorized paper drafts, which generally have a high reject rate to the more efficient ACH system."

ACH: Return Items

"The Federal Reserve Act Automated System is very complex. The codes are not explicit and the method of settlement is unclear."

"To eliminate the process of manually returning items, financial organizations should be returning them automatically. All financial organizations should return credits in a more timely manner, whether they are being posted to a closed account or to a lost account."

"We automated our return procedures approximately two years ago. We have found many advantages, such as decreased cost, timely processing and settlement. The few errors that did occur were resolved with the aid of our state clearing house."

"New automated returns system does not provide all the necessary information, which was available on paper returns, to understand why the item is being returned. Vital information such as, "what the correct information" is on notices of corrections is important to the receiving bank in order to make the necessary corrections. Most banks do not indicate what is wrong with the return at all."

"Financial institutions should be penalized for mishandling ACH returns. Standards similar to checks should be established and followed."

ATM: Settlement

"ATM settlement is being accomplished with little or no problems. Cash differences are well below defined goals. All transactions are being accounted for."

"Settlement at banking office locations presents minimal problems. Off-site location settlements are settled by the staff of the banking office located in close proximity to ATM. We have investigated the use of vendors to service offsite ATM's, however, a limited number of locations preclude contracting with them."

"We perform all settlement at one central location, not in the branches."

"It is confusing to have differing settlement times throughout the day. Our settlement day ends when each machine is settled by the branch. One regional network settles with us for the total at 4:00 p.m. E.S.T. and another at 6:00 p.m. E.S.T. We always have hold-over items which clear out the next day."

ATM: Vandalism

"Vandalism has decreased overall because of the apparent awareness of surveillance equipment."

"Except for one incident during the past 12 months, problems with vandalism have been minimal. In the one particular incident, damage was diverted more towards the immediate ATM environment and not to the actual machine."

"We have experienced minimal vandalism primarily because of the location of ATMs and the overall market area."

"Minor vandalism has occurred at several ATM locations during the past year."

"Minimal problems — mostly vestibule telephone damage."

"Our network has not experienced a major problem with vandalism on our ATMs. The few instances that have occurred have been isolated cases with relatively minor damage to the machines."

ATM: Availability

"ATM availability has increased. The implementation of an on-line ATM monitoring program that permits early detection (and correction) of minor ATM "problems" before they become "malfunctions" is a contributing factor to this."

"Our availability is very high systemwide because of refined procedures and trained personnel."

"ATM availability continues to average over 98 percent. Our bank is presently evaluating the way in which availability is measured. Rather than losing availability on the actual number of hours of operation, a proposal is being considered to measure ATM success/availability as a factor of lost customer transactions."

"Our network has an average availability of 96 percent. This can be attributed to closer daily monitoring of the network. When failures do occur, they are acted upon more quickly, resulting in less downtime and greater availability to the customer. In addition, we have developed a training program for our branch personnel so that they are experienced with the operation and routine maintenance of the ATM."

ATM: Fraud/Losses

Losses related to "unauthorized" use of customer access cards have increased 32 percent from last year at this time."

"We have experienced a 59 percent increase in losses over the first eight months in 1984."

"Fraud/losses continue to be of concern. However, our losses are not increasing as fast as our transaction volume."

"Current year-to-date losses are less than half of the losses for 1984. Overall, all categories of losses are down from the previous year."

"Fraud losses are equal to last year in number and amount. Again, they are primarily due to customer negligence with regard to PIN security."

"We have experienced substantial increases in losses over 1984. This is primarily due to increasing the withdrawal limits and issuing temporary ATM cards in the branches."

"Fraud losses are minimal primarily due to the carefully selected location of most of the machines."

"Fraud is increasing. Empty envelopes are our biggest problem."

ATM: Security

"In general, no problems are being encountered relative to physical machine security, cash/deposit control, transaction accountability, and customer well-being."

"There has been improvement over 1984, because of the engagement of a four-wire data circuit versus a two-wire. The new circuit provides the capability of performing an analysis on the line."

"Security has not presented problems. Card access to vestibules is used. Cameras are not used at this time, and we do not anticipate future installation. Again, overall market area and location of machines enhance security of units."

"Cameras have not proved to be helpful in vandalism, but they are helpful in resolving transaction disputes."

"We have aggressively educated customers concerning personal safety in ATM environments, both local and national."

Regulation E

"The regulation is too consumer oriented. The consumer's liability is so limited he/she does not share in the responsibility of the debit card."

"Our regional interchange has instituted an automated Regulation E adjustment system this year. This system has greatly reduced our paperwork, it insures that Regulation E problems are resolved promptly, and it has enabled us to reduce our research time."

"Most disputes covered by Regulation E are caused by customer errors. The number of bank-caused errors is well below the level of acceptance. All are being rectified within 10 business days following their discovery."

"Regulation E does not appear adequate to handle POS. Specific provisions for transaction descriptions fall awkwardly on the retailers by some interpretations. This is not appropriate."

"Unauthorized usage claims have slightly increased."

RETAIL FINANCIAL SERVICES COMMISSION
1985-86

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